LG

KE-14U73X

MODEL

SERVICE MANUAL

ADJUSTMENT INSTRUCTIONS

Notes;

(Adjustments must be performed by the following procedures)

1. It is recommended that an isolation transformer be used when servicing this chassis to prevent electric shock and damage to test equipment.
2. The ac line voltage must be maintained at 230 vac, +- 10%, 50/60 hz.
3. Prior to making any adjustments, the receiver must be operated for 10 minutes.

1. DECK ADJUSTMENT

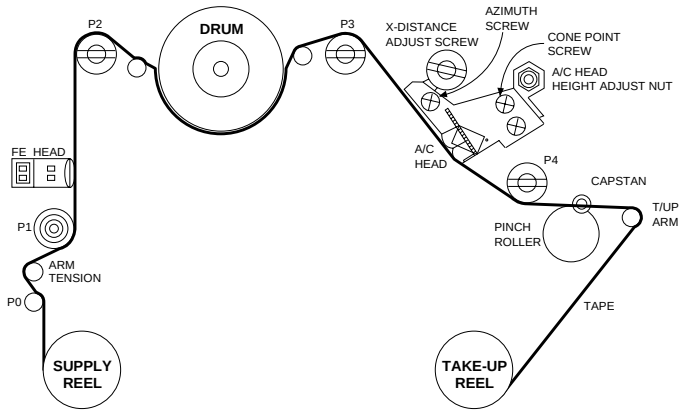
1. Deck Transit System Adjustment

1-1. Necessary Instruments

1) TAPE for SP
2) Oscilloscope
3) 10:1 Probes 2EA
4) Adjustment Driver
   (P2, P3, X-distance (NUT), Audio (NUT) control)
5) RMS Meter (Audio Level Meter)

1-2.Preliminary Steps

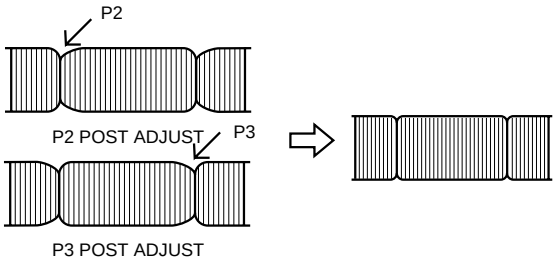
1) Connect CH 1 of the oscilloscope to J123 (H/SW) on the main PCB. Trigger on this channel.
2) Connect CH 2 of the oscilloscope to J158 (RF) on the main PCB. Monitor this waveform when preceding with step 4.
3) Play an alignment tape.
4) When the "auto Trk" caption appears on screen, press the TRK up (+) button on the RCU to initialize the manual tracking feature.
5) If manual tracking differs from auto tracking, precede with steps 1-3 (RF Linearity) and 1-4 (X-Distance Adj.).



<Adjust Parts Location>

1-3. RF linearity check and adjustment

1) Adjust P2 & P3 so that the RF ENVELOPE waveform is maximum and stabilized .
2) Check if the ENVELOPE waveform is at its maximum size by pressing TRK UP(+) and DOWN(-) button one step.



<Adjustment waveform>

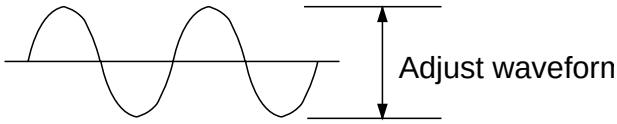
1-4. X-Distance Adjustment

1) Turn the Cone Screw of the DECK left or right so that th RF waveform is maximum.
2) Check if the RF waveform satisfies the linearity b pressing TRK UP(+) and DOWN(-) button one step.

   CAUTION: If the RF waveform becomes maximum wit the Cone Screw more than 2 turns, its out of adjustment. (2 turns; 720°)

1-5. Audio Level Check and Adjustment

1) Connect "+" terminal of RMS Meter (Audio Level Mete to J108 on MAIN PCB AUDIO OUT and "-" terminal to GNI respectively.
2) Play the 1khz and 7khz segments on the alignment tap and confirm if the spec is meet in item #3. If not adjus the azimuth screw to meet this spec.
3) Audio Level Spec: 1KHz ; 0.5 ± 0.1Vrms
   6KHz ; 1K ± 1.5dB



<Adjustment Waveform>

2. CIRCUIT ADJUSTMENT

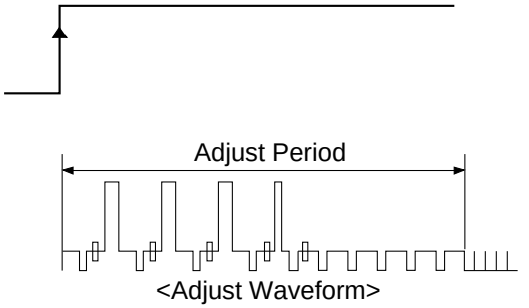
1. PG Adjustment

1-1. Necessary Instruments

1) Alignment tape SP
2) Oscilloscope
3) 10 : 1 Probe

1-2.Adjustment

1) PLAY exclusive use of SP tape. (2HD: NORMAL TAPE)
2) Connect CH 1 of the Oscilloscope to J123 (H/SW) on th MAIN PCB and VOL/DIV to 1V Range and Trigger th Oscilloscope.
3) Connect CH 2 of the oscilloscope to J241 (Video Out) c the main PCB and set the VOL/DIV to 500mV Range.
4) Set TIME/DIV of oscilloscope to 50 μs Range.
5) Adjust VR01 so that V-sync Falling Edge of Video signal become 412 μsec±20μsec.



<Adjust Waveform>

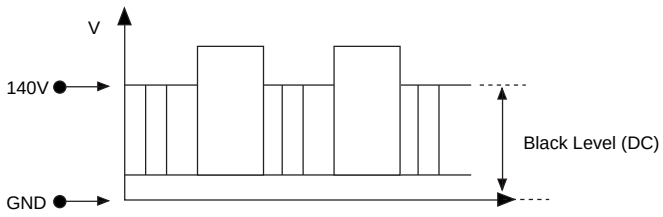
* **CAUTION:** Set the trigger mode of Oscilloscope to DC.

3. Focus Voltage Adjustment

1) Receive the cross hatch pattern.
2) Press the PICTURE button to set the Standard ON condition.
3) Adjust Focus control knob so that the focus of center & circumference to be best.

4. Screen Adjustment

1) Receive PAL DIGITAL PATTERN.
2) Select channel 0.
3) Connect the probe of oscilloscope to the RK of CPT PCB.
4) Adjust screen volume of FBT so that the waveform is the same as below figure.



⁕ How to get into SVC mode when you don't have SVC Remote Controller.
Push the "OK" Key on the user's Remote Controller and local "OK" button at the same time.

5. SIF Adjustment

1) Receive PAL DIGITAL PATTERN.
2) Connect the DMM to pin 5 of IC100 (SIF TP).
3) Adjust L107 to be DC 2.3±0.05V.

6. RF AGC Adjustment

1) Input PAL DIGITAL PATTERN.
2) Connect DMM to AGC(J184) test point on the Main PCB.
3) Press SVC Key on the Service Remote Controller to get into SVC mode and press PR +/- Key to select AGC.
4) Press VOL +/- Key until DMM reads the data on the table below.

MODEL	KL/KF/KE	KI
Electric fields strength	65dBu ± 0.2dBu	65dBu ±0.2dBu
AGC Voltage	2.3 ± 0.1Vdc	2.1±0.1Vdc

7. White Balance Adjustment

1) Input a signal which lower half is black and upper half white.
2) Set the picture at standard on.
3) Press SVC Key on the Service Remote Controller to ge into Service mode.
4) Press PR +/- Key to select BG, RG.
Press VOL +/- Key until X=281±3, Y=288±3.

⁕ GG is fixed data at 32 so, do not adjust GG data.

8 Deflection Data Adjustment

1) Input PAL Digital Pattern.
2) Press SVC Key on the Service Remote Controller an select LINE SERVICE 2 mode.
3) Press PR +/- Key to select an adjustment mode.
4) Press VOL +/- Key to adjust data.

5) Vertical SLOPE adjustment
a. Select V-SLP mode with PR +/- Key.
b. Press VOL +/- Key until the horizontal center line of th large circle coincides with Blanking Line.

6) Vertical amplitude adjustment
a. Select V-AMP mode with PR +/- Key.
b. Press VOL +/- Key until the upper and lower end of th large circle reach 5 mm inside from the effective are of CPT.

7) Vertical Shift Adjustment
a. Select V-SFT mode with PR +/- Key.
b. Press VOL +/- Key until the horizontal center coincide with the vertical sign slot mark of CPT.

8) Horizontal Shift Adjustment
a. Select H-SFT mode with PR +/- Key.
b. Press VOL +/- Key until the vertical center coincide with the horizontal sign slot mark of CPT.

9) Vertical S-Correction Adjustment
a. Select S-COL mode with PR +/- Key.
b. Press VOL +/- Key until the grid of Cross Hatch Patter is even all over the screen.

Colour TVCR
OWNER'S MANUAL

Please read this manual carefully before operating your set.
Retain it for future reference.
Record model number and serial number of the set.
See the label attached on the back cover and quote this information to your dealer when you require service.

Model number :
Serial number :

FOR THE GUARANTEE TERMS & CONDITIONS,
PLEASE REFER TO BACK COVER OF THIS MANUAL

P/NO : 3828VA0190D (MV995A, 032C/E TX)
(3840VA0024A/B, 3840VA0016A, 373-026F)

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Installation

Power

This set operates on an AC mains supply, the voltage is as indicated on the label on the back cover. Never apply DC power to the set. In the event of thunderstorms or powercuts, please pull out the aerial and mains plugs.

Warning

To prevent fire or shock hazard, do not expose the set to rain or moisture.

Wiring (in U.K. only)

This set is supplied with a BS 1363 approved 13 amp mains plug, fused at 5 amp. When replacing the fuse always use a 5 amp BS 1362, BSI or ASTA approved type. Never use this plug with the fuse cover omitted. To obtain a replacement fuse cover contact your dealer or "LG Electronics U.K. Ltd.".

If the type of plug supplied is not suitable for the mains sockets in your home, then the plug should be removed and a suitable type fitted. Please refer to the wiring instructions below:

Warning (in U.K. only)

A mains plug removed from the mains lead of this set must be destroyed. A mains plug with bared wires is hazardous if inserted in a mains socket.

Do not connect either wire to the earth pin, marked with the letter E or with the earth symbol ⏚ or coloured green or green and yellow.

If any other plug is fitted, use a 5 amp fuse, either in the plug, or at the distribution board.

Important (in U.K. only)

The wires in this mains lead are coloured in accordance with the following codes:

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this set may not correspond with the coloured marking identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Service

Never remove the back cover of the set as this can expose you to very high voltage and other hazards. If the set does not operate properly, unplug it and call your dealer.

Aerial

Connect the aerial cable to the socket marked ⅄75Ω on the back cover. For the best reception an outdoor aerial should be used.

Location

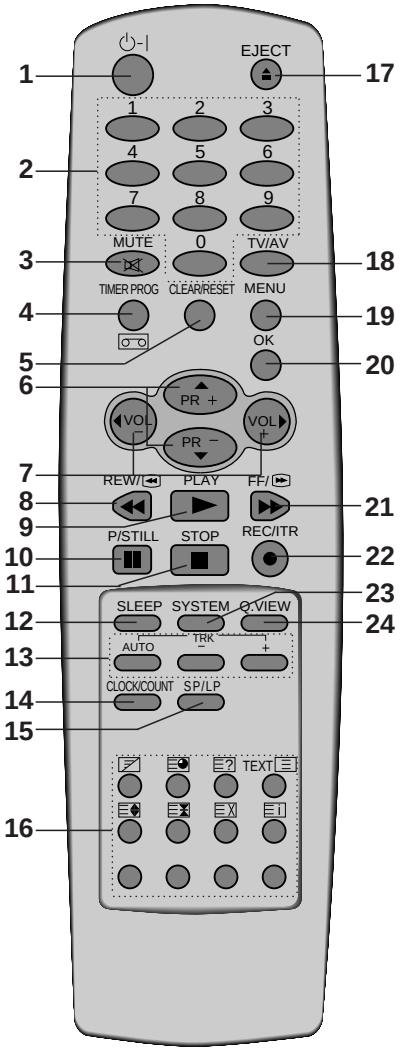
Position your set so that no bright light or sunlight falls directly onto the screen. Care should be taken not to expose the set to any unnecessary vibration, moisture, dust or heat. Also ensure that the set is placed in a position to allow a free flow of air. Do not cover the ventilation openings on the back cover.

Location and function of controls

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set.

Remote control handset

Before you use the remote control handset, please install the batteries. See the next page.



(With TELETEXT)

1. ⏻-I **(POWER)**
   switches the set on from standby or off to standby.

2. **NUMBER BUTTONS**
   switch the set on from standby or directly select a number.

3. **MUTE**
   switches the sound on or off.

4. **TIMER PROG**
   displays the timer programme recording menu.

5. **CLEAR/RESET**
   resets the tape counter or clears a data in the **Timer programme** menu.

6. **▲ / ▼ (PROGRAMME UP/DOWN)**
   switches the set on from standby.
   selects a programme or a menu item.

7. **◄ / ► (VOLUME UP/DOWN)**
   adjusts the volume.
   adjusts menu settings.

8. **REW (REWIND/REVIEW)**
   rewinds the tape at high speed in the stop mode.
   reviews fast the tape during playback.

9. **PLAY**
   plays back the tape at normal speed.

10. **PAUSE/STILL**
    stops the tape temporarily during recording.
    displays a still picture during playback.

11. **STOP**
    stops the tape during playback or recording.

12. **SLEEP**
    sets the sleep timer.

13. **TRK AUTO, +/-**
    adjust the picture automatically or manually during playback.

14. **CLOCK/COUNT**
    displays the current time or tape counter.

15. **SP/LP**
    selects a recording tape speed SP or LP.

16. **TELETEXT BUTTONS (option)**
    These buttons are used for teletext.
    For further details, see the 'Teletext' section.

Location and function of controls

17. EJECT
ejects the tape.

18. TV/AV
selects a TV or AV mode.

19. MENU
selects a menu.

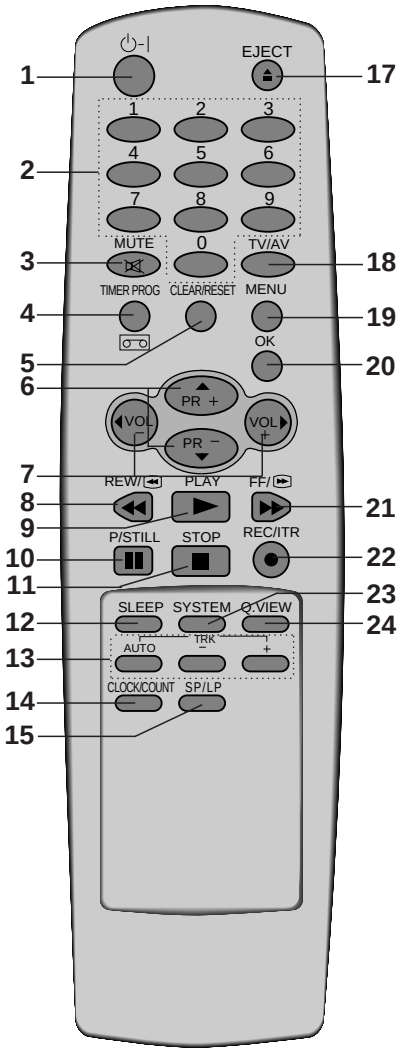
20. OK
accepts your selection or displays the current mode.

21. FF (FAST FORWARD/CUE)
winds the tape forward at high speed in the stop mode.
fast forward playback.

22. REC/ITR
starts a manual recording or instant timer recording.

23. SYSTEM
selects the desired VCR colour system.

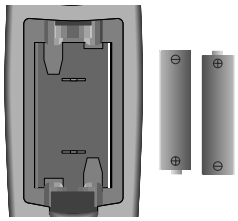
24. QUICK VIEW
returns to the previously viewed programme.



(Without TELETEXT)

Battery installation

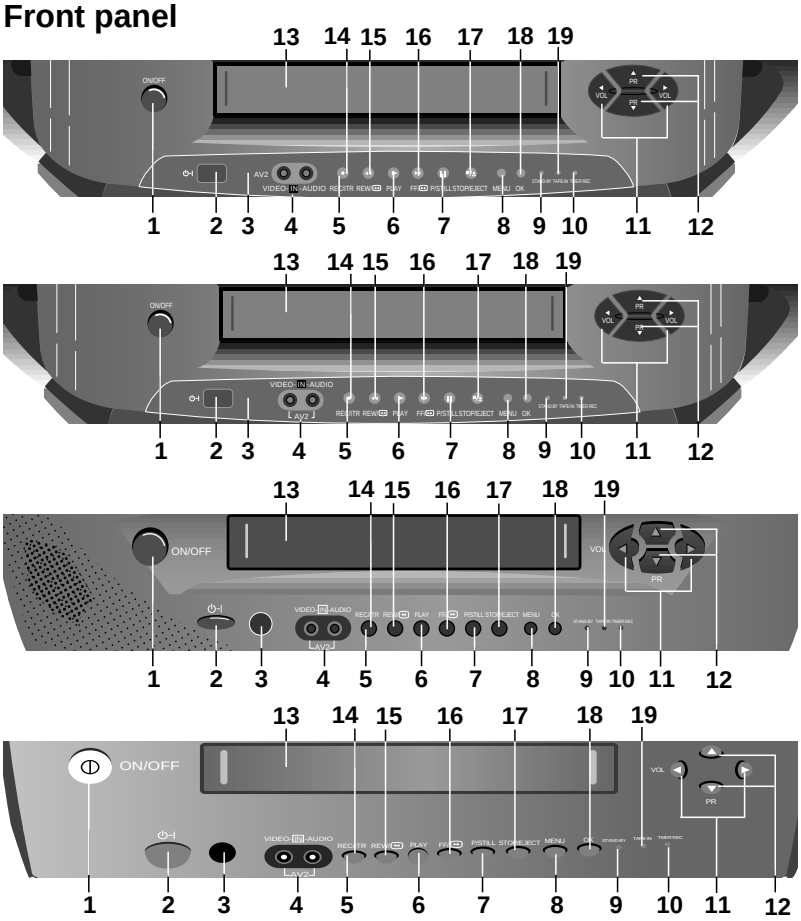
The remote control handset is powered by two AA type batteries. To load the batteries, turn the handset over and slide open the battery compartment. Install two batteries as indicated by the polarity symbols(⊕ and ⊖) marked inside the compartment.



***Note** : To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.*

Location and function of controls

Front panel


13 14 15 16 17 18 19
1 2 3 4 5 6 7 8 9 10 11 12
ON/OFF
VOL
PR
AV2
VIDEO IN AUDIO
REC/ITR REW PLAY FF PSTILL STOP EJECT MENU OK
STANDBY TAPE-IN TIMER REC

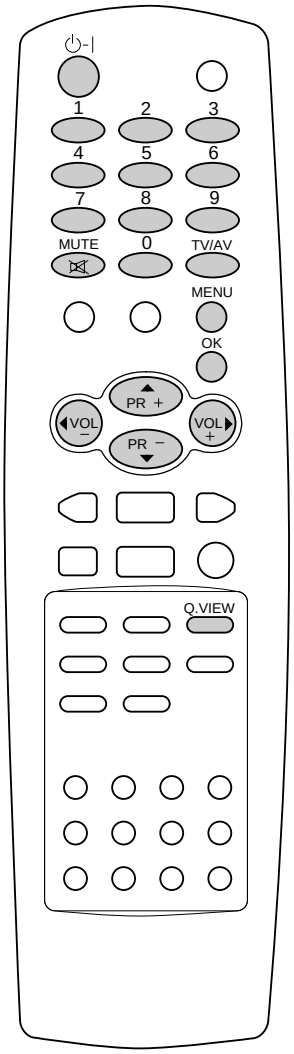
1. **MAIN POWER (ON/OFF)**
   switches the set on or off.
   ***Note** : One power line lives even when the main power is off.*
2. **POWER (⏻-I)**
   switches the set on from standby or off to standby.
3. **REMOTE CONTROL SENSOR**
4. **AUDIO/VIDEO IN SOCKETS (AV2)**
   Connect the audio/video out sockets of the external VCR to these sockets.
5. **REC/ITR**
   starts a manual recording or instant timer recording.
6. **PLAY**
   plays back the tape at normal speed.
7. **PAUSE/STILL**
   stops the tape temporarily during recording.
   displays a still picture during playback.
8. **MENU**
   selects a menu.
9. **STANDBY INDICATOR**
   illuminates red brightly when the set is in standby mode.
   dims red when the set is switched on.
10. **TIMER REC INDICATOR**
    illuminates red when the timer programme is set for recording.
11. **VOLUME UP/DOWN**
    adjusts the volume.
    adjusts menu settings.
12. **PROGRAMME UP/DOWN**
    switches the set on from standby.
    selects a programme or a menu item.
13. **CASSETTE COMPARTMENT**
    To insert a video cassette tape here.
14. **REC/ITR INDICATOR**
    illuminates red during recording.
15. **REW (REWIND/REVIEW)**
    rewinds the tape at high speed in the stop mode.
    reviews fast the tape during playback.
16. **FF (FAST FORWARD/CUE)**
    winds the tape forward at high speed in the stop mode.
    fast forward playback.
17. **STOP/EJECT**
    stops the tape during playback or recording or ejects the tape.
18. **OK**
    accepts your selection or displays the current mode.
19. **TAPE-IN INDICATOR**
    illuminates green while a video cassette tape is inserted.

Basic operation

On and off

1. Press the main power button on the front of the set to switch the set on.
2. If the set is in standby mode, press the ⏻-I (POWER), ▲ / ▼, **TV/AV** or NUMBER buttons to switch it on fully.
3. Press the ⏻-I (POWER) button. The set reverts to standby mode.
4. Press the main power button again to switch the set off.

Note : *If, while the set is switched on, the mains plug is disconnected the set will switch to standby when the mains plug is replaced in the mains power socket.*



Programme selection

You can select a programme number with the ▲ / ▼ or NUMBER buttons.

Volume adjustment

Press the ◀ / ▶ button to adjust the volume.

Mute function

Press the **MUTE** button. The sound is switched off and the display 🔇 appears. You can cancel it by pressing the **MUTE** or ◀ / ▶ button.

Quick view

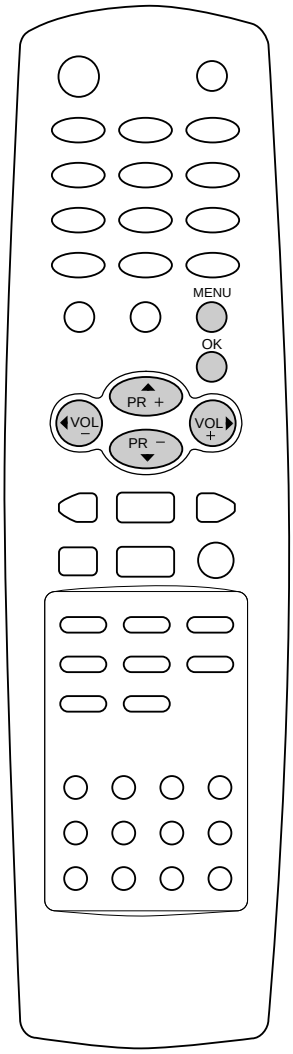
Press the **Q.VIEW** button to view the last programme you were watching.

On screen language selection (option)

This is an optional function. In the models which have on screen language function, the menu can be displayed on the screen in the desired language. First select your language.

1. Repeatedly press the **MENU** button to select MENU 3.
2. Press the ▲ / ▼ button to select **Language**.
3. Press the ◀ / ▶ button to select the desired language.
   All the on screen displays will appear in the selected language.
4. Press the **OK** button to return to normal TV viewing.

On screen menus



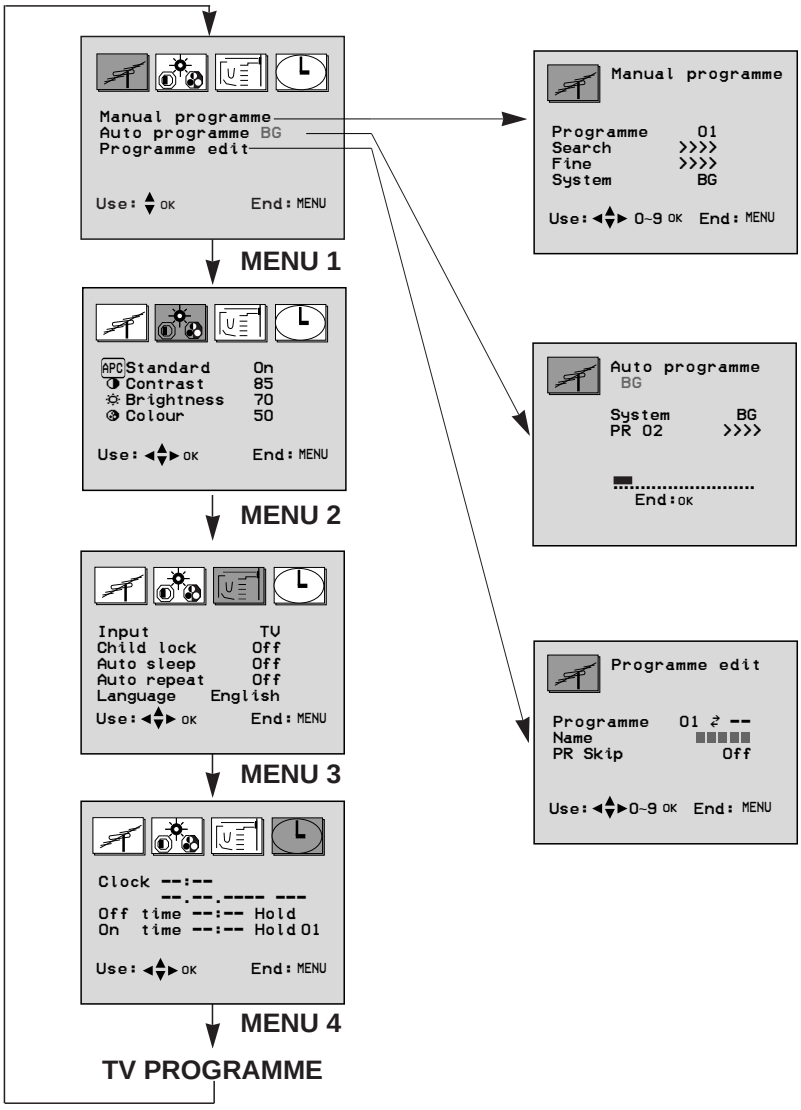
The dialogue between you and your set takes place on screen with an operator menu. The buttons required for the operating steps are also displayed.

Menu selection

1. Repeatedly press the **MENU** button to display each menu.
2. Press the ▲ / ▼ button to select a menu item.
   The selected menu item changes from blue to purple.
3. Press the ◄ / ► button to set a menu item or **OK** button to display the sub menu.

Note :

*a. The menus automatically disappear in about 12 seconds if you do not press a button. However if you press the **MENU** button again, the last selected menu will appear.*
b. In the AV, playback or recording mode, MENU 1 is not displayed.
c. In the teletext mode, menus are not displayed.
*d. In some models, **Auto programme Auto** appears in MENU 1.*



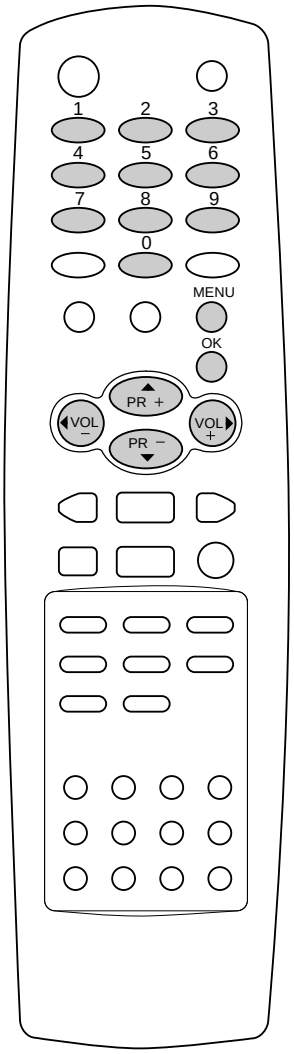
Setting up TV stations

Up to 100 TV stations can be stored in this set by programme numbers (00 to 99). Once you have preset the stations, you will be able to use the ▲ / ▼ or NUMBER buttons to scan the stations you programmed.
Stations can be tuned using an automatic or a manual mode.

MENU 1

Auto programme tuning

All stations that can be received are stored by this method. It is recommended that you use auto programme during installation of this set.



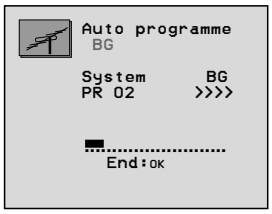
1. Repeatedly press the **MENU** button to select MENU 1.
2. Press the ▲ / ▼ button to select **Auto programme**.
3. Press the ◀ / ▶ button to select the beginning system **BG**, **I** or **DK**.
   BG : PAL B/G, SECAM B/G (Europe/East Europe etc.)
   I : PAL I/II (U.K./Ireland)
   DK : PAL D/K, SECAM D/K (East Europe)

   Option :
   In some models, the display **Auto**, **L** or **BG** in **Auto programme** mode appears on the screen.

   Auto : SECAM L/L', PAL B/G, SECAM B/G
   L : SECAM L/L' (France)
   BG : PAL B/G, SECAM B/G (Europe/East Europe etc.)

If you select a system to **Auto**, the system automatically changes **System L → System BG**

4. Press the **OK** button to begin auto programming.



When auto programming is completed, the station stored into programme number 1 will appear on the screen.

To stop auto programming, press the **OK** button. The active programme at that time will be displayed.

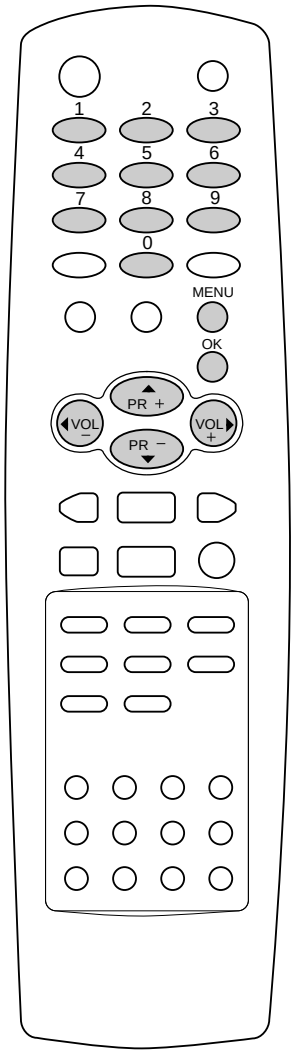
Note :

a. In some models, the station name may be stored for stations which broadcast VPS (Video Programme Service), PDC (Programme Delivery Control) or TELETEXT data. If no station name can be assigned to a station, the channel number is assigned and stored.

*b. Some undesired stations may be stored, such as noisy or unclear signals from distant transmitters. You can easily skip these stations by entering **Programme edit** mode.*

Setting up TV stations

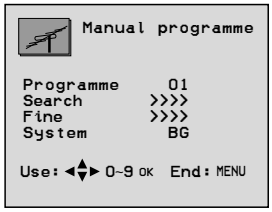
MENU 1



Manual programme tuning

Manual programme lets you manually tune and arrange the stations in whatever order you desire.

1. Repeatedly press the **MENU** button to select MENU 1.
2. Press the ▲ / ▼ button to select **Manual programme**.
3. Press the **OK** button to display the **Manual programme** mode.



4. Press the ▲ / ▼ button to select **Programme**. Select the desired programme number with the ◀ / ▶ button or NUMBER buttons. Any number under 10 is entered with a numeric '**0**' in front of it, i.e. '**05**' for 5.
5. Press the ▲ / ▼ button to select **System**. Press the ◀ / ▶ button to select **BG**, **I** or **DK** as required.
   Option :
   In some models, the display **System** (**L** or **BG**) appears. In that case, press the ▲ / ▼ button to select **System** then select **L** or **BG** with the ◀ / ▶ button.
6. Press the ▲ / ▼ button to select **Search**. Press the ◀ / ▶ button to commence searching. If a station is found the search will stop.
7. If this station is the one required press the **OK** button, if not press the ◀ / ▶ button again.
8. Press the **OK** button. The display **Stored** will appear.
9. To store another station repeat steps 4 to 8.
10. Repeatedly press the **MENU** button to return to normal TV viewing.

Fine tuning

Normally fine tuning is only necessary if reception is poor.

1. Repeat steps 1 to 3 above.
2. Press the ▲ / ▼ button to select **Fine**.
3. Press the ◀ / ▶ button to fine tune for the best picture and sound.
4. Press the **OK** button. The display **Stored** will appear.
5. Repeatedly press the **MENU** button to return to normal TV viewing.
   The finely tuned programme will be indicated by yellow number during programme selection.

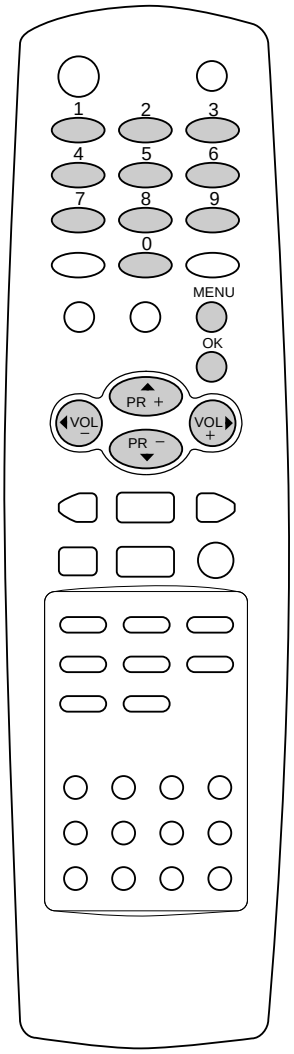
Setting up TV stations

Programme edit

MENU 1

This function enables you to rearrange the programmes stored by auto programming in whatever order you desire. Also you can skip particular programme numbers stored by auto programming.

1. Repeatedly press the **MENU** button to select MENU 1.
2. Press the ▲ / ▼ button to select **Programme edit**.
3. Press the **OK** button, and the **Programme edit** mode will appear.



Exchanging programmes

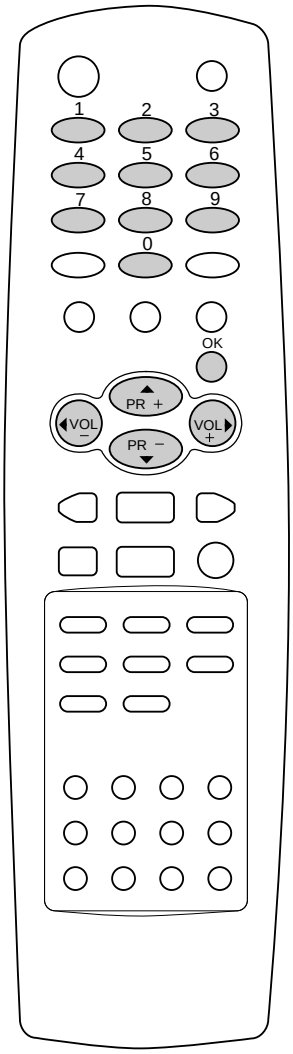
1. Press the ◀ / ▶ button to change the left hand programme number. The viewing station corresponding to the new programme number is shown on the screen.
2. Press the NUMBER buttons to select the desired right hand programme number. Any number under 10 is entered with a numeric '**0**' in front of it, i.e. '**05**' for 5.
3. Press the **OK** button. The station stored in the right hand programme number will now appear as the left hand programme number.
4. Repeat steps 1 to 3 to exchange other programmes.

Assigning a station name

1. Select the programme to which you want to assign a station name with the ◀ / ▶ button.
2. Press the ▲ / ▼ button to select **Name**.
3. Select a character position with the ◀ / ▶ button.
4. To select your desired first character, press the ▲ button several times or continuously. The ■ will blink, followed by the alphabet **A** to **Z**, **a** to **z**, the numeric **0** to **9**, **–**, **+**, **.** in turn. With the ▼ button you can select in the opposite direction.
5. Select the next position by pressing the ▶ button and then take your choice of the second character, and so on.
6. Press the **OK** button.
7. Repeat steps 1 to 6 to assign another station name.

Setting up TV stations

MENU 1



Skipping a stored programme

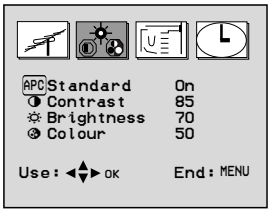
1. Press the ◀ / ▶ button to select the programme you want to skip.
2. Press the ▲ / ▼ button to select **PR Skip**.
3. Press the ◀ / ▶ button to select **On** or **Off**.
   If you select **On**, the selected station is skipped.
4. Press the **OK** button.
5. Repeat steps 1 to 4 to skip another programme.

The selection of the skipped programme numbers with the NUMBER buttons is still possible and they will be indicated by blue numbers during programme selection.

Note : *You cannot skip the programme number 1.*

Picture adjustment

Auto picture control



MENU 2

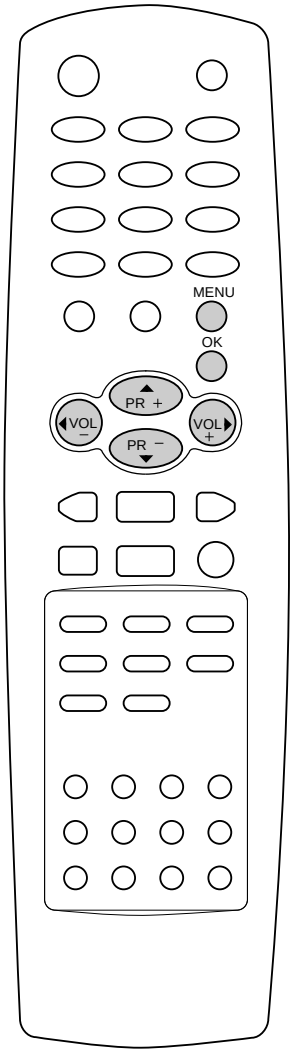
If you want to select the standard picture, select **Standard On**. The **Standard** picture is programmed for good picture reproduction at the factory and cannot be changed.

1. Repeatedly press the **MENU** button to select MENU 2.
2. Press the ▲ / ▼ button to select **APC Standard**.
3. Press the ◀ / ▶ button to select **On**.
4. Press the **OK** button to return to normal TV viewing.

Picture adjustment

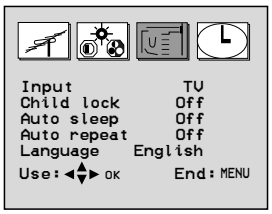
You can adjust picture contrast, brightness, colour intensity and tint (NTSC AV only) to the levels you prefer.

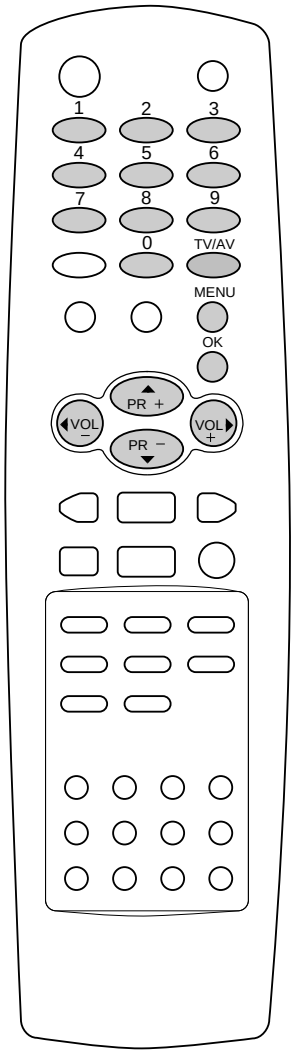
1. Repeatedly press the **MENU** button to select MENU 2.
2. Press the ▲ / ▼ button to select the desired picture item.
3. Press the ◀ / ▶ button to make appropriate adjustments.
4. Press the **OK** button to return to normal TV viewing.



Other functions

MENU 3





TV and AV modes

Inputs can be set for TV or AV mode. AV mode is used when an external VCR or other equipment is connected to the set.

Note : *When an external equipment is connected via the aerial socket the set is used in TV mode. See the 'Connection of external equipment' section.*

1. Repeatedly press the **MENU** button to select MENU 3.
2. Press the ▲ / ▼ button to select **Input**.
3. Press the ◄ / ► button to select **TV**, **AV1** or **AV2**.
   The two AV modes are :
   AV 1 : VCR connected to the Euro scart socket on the back
   AV 2 : VCR connected to the **AV2** sockets on the front
4. Press the **OK** button.

To return to TV mode from AV mode, press the ▲ / ▼ or NUMBER buttons.

Alternatively you can select the TV or AV mode by pressing the **TV/AV** button.

Auto AV switching

If your VCR outputs switching voltage when it is switched to playback with the VCR connected to the Euro scart socket. The set is automatically switched to **AV 1** mode when an AV signal is input. But if you want to keep on watching TV mode, press the ▲ / ▼ or NUMBER buttons.
Press the **TV/AV** button to return to AV modes.

Child lock

The TV can be set so that the remote control handset is needed to control it. This feature can be used to prevent unauthorized viewing.

1. Repeatedly press the **MENU** button to select MENU 3.
2. Press the ▲ / ▼ button to select **Child lock**.
3. Press the ◄ / ► button on the remote control handset to select **On**.
4. Press the **OK** button to return to normal TV viewing.

With the lock on, the display **Child lock On** appears on the screen if any button on the front panel is pressed while viewing the TV.

Auto sleep

If you select **Auto sleep On** the set automatically switches itself to standby mode approximately 10 minutes after a TV station stops broadcasting.

1. Repeatedly press the **MENU** button to select MENU 3.
2. Press the ▲ / ▼ button to select **Auto sleep**.
3. Press the ◄ / ► button to select **On**.
4. Press the **OK** button to return to normal TV viewing.

Auto repeat

To play back the tape repeatedly, select **Auto repeat On**.

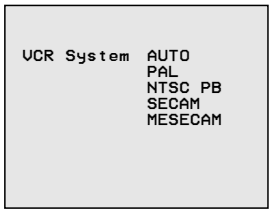
1. Repeatedly press the **MENU** button to select MENU 3.
2. Press the ▲ / ▼ button to select **Auto repeat**.
3. Press the ◄ / ► button to select **On**.
4. Press the **OK** button to return to normal TV viewing.

Other functions

VCR colour system setting

You can adjust the VCR colour system. Under normal circumstances, select **AUTO**. If necessary (if input signal is weak), change the colour system by using the instructions below.

1. Press the **SYSTEM** button. The **VCR System** mode will appear.



2. Repeatedly press the **SYSTEM** button to select the correct system.

   Option:
   In some models, **MESECAM/SECAM** is an optional function. Only a set with **MESECAM/SECAM** can perform this function.

Note :
*a. **NTSC PB** is for playback only. You cannot record NTSC signals.*
*b. If the picture is no colour during playing back a MESECAM video cassette tape in **AUTO**, select **MESECAM** instead of **AUTO**.*

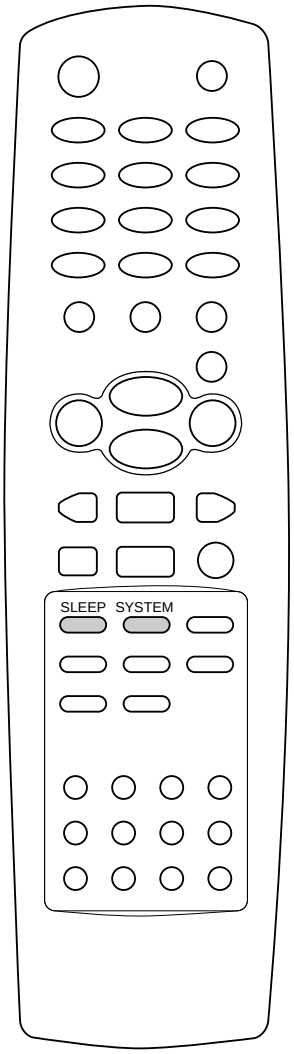
Sleep timer

You don't have to switch the set off before you go to sleep. The sleep timer automatically switches the set to standby after the preset time elapses.

To select the number of minutes, repeatedly press the **SLEEP** button. **---** will appear on the screen, followed by **10**, **20**, **30**, **60**, **90**, **120**, **180** and **240**.

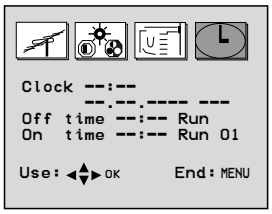
The timer begins to count down from the number of minutes selected.

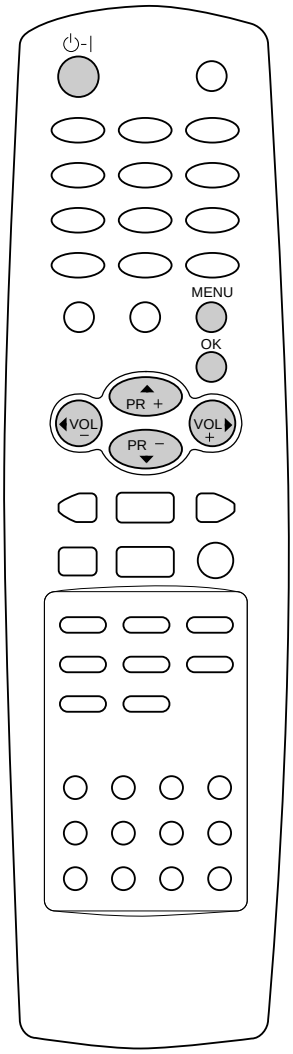
Note :
*a. To view the remaining sleep time, press the **SLEEP** button once.*
*b. To cancel the sleep time, repeatedly press the **SLEEP** button until the display **Sleep** --- appears.*
c. When you switch the set off, the set releases the preset sleep time.



Time setting

MENU 4





Clock

The clock uses the 24 hour system and must be set to the correct time before operating the set.

1. Repeatedly press the **MENU** button to select MENU 4.
2. Press the ▲ / ▼ button to select **Clock**.
3. Select and adjust hour and minute by pressing the ◀ / ▶ and ▲ / ▼ button.
4. Select and adjust the day, the month and the year by pressing the ◀ / ▶ and ▲ / ▼ button. The day of the week is automatically displayed.
5. Press the **OK** button to start.
6. Press the **MENU** button to return to normal TV viewing.

Note :

a. The clock operates for at least 10 minutes, if the power is switched off or there is a power interruption (disconnection or power failure).

b. If you have already set the timer programme, you cannot reset the clock. To reset the clock, first cancel timer programme settings.

On/off time

By using this function, the set automatically switches on or off at a preset time. You must set the time correctly before using on/off time function.

1. Repeatedly press the **MENU** button to select MENU 4.
2. Press the ▲ / ▼ button to select **Off time** or **On time**.
3. Select and adjust hour and minute by pressing the ◀ / ▶ and ▲ / ▼ button.
4. Select and adjust **Run** or **Hold** by pressing the ◀ / ▶ and ▲ / ▼ button.
5. Select and adjust the programme number by pressing the ◀ / ▶ and ▲ / ▼ button.
6. Press the **OK** button to start.
7. Press the **MENU** button to return to normal TV viewing.

For off time, please note the absence of programme number.

Note :

a. In the event of power interruption (disconnection or power failure), the clock must be reset.

b. If the same time is set for the on time and the off time, only the off time operates.

*c. This set must be put into standby mode with the **POWER** button to operate the on time function.*

d. If the on time function activates, the set will automatically switch to the on time programme number, even during viewing.

e. Two hours after the set is switched on by the on time function it will automatically switch back to standby mode unless a button has been pressed.

f. Once the on or off time is set, these functions operate daily at the preset time.

VCR operation

Playing tapes

To play back a VHS video cassette tape which has no safety tab in position (this means you cannot record on to it), insert it into the set in the standby mode.
The set will at once switch itself on and perform the following sequence by itself:

PLAY → STOP → REWIND → EJECT

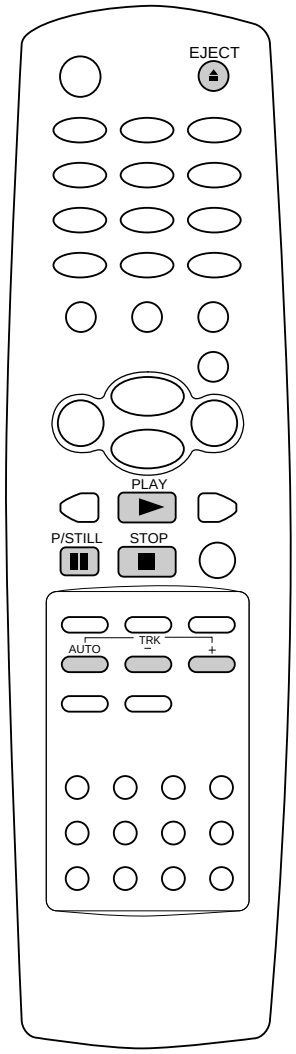
To play back a VHS video cassette tape which has its safety tab in position (this means that you have recorded on it and left the tab untouched), insert it into the set in the standby mode.
Now you must press the **PLAY** button.

To stop playback, press the **STOP/** ■ button.

To take out the tape, press the **EJECT/⏏** button.

Note :

a. *During **Timer programme** set, if you try to insert a video cassette tape without a safety tab in standby mode, the tape will automatically be ejected.*
b. *If you have already set **Auto repeat** to **On** in MENU 3, the tape will play back repeatedly.*
c. *In some models, only SP (Standard Play) speed is available.*



Tape tracking control

Tracking ensures that the tape is correctly aligned with the playback head. It works only during playback and its principal purpose is to minimize picture shake and noise (fuzzy lines across the picture). It is adjusted automatically or manually.

Auto tracking

Whenever playback starts, auto tracking automatically adjusts the picture. The display A.TRK will appear while the best picture is selected.
To reactivate auto tracking, press the **AUTO TRK** button on the remote control handset.

Manual tracking

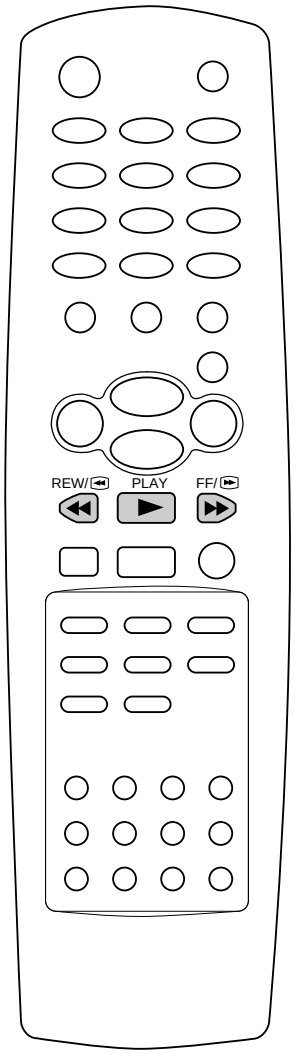
You can manually adjust the picture by pressing the **TRK +/-** buttons.

Pause/still picture

To temporarily pause playback, press the **P/STILL** button. A still picture and the display ▮▮ will appear on the screen.
If a still picture lasts for more than five minutes, the set will switch to the stop mode to protect the tape and the video heads.
To restart play back, press the **PLAY** button.

To temporarily stop recording, press the **P/STILL** button. The display ● ▮▮ will appear. Press this button again to continue recording.

VCR operation



Fast forward, cue, rewind and review

Forward search

Press the **FF/** button during playback.

The display will appear and the tape plays faster than normal speed. Press the **PLAY** button to return to normal speed.

Pressing the **FF/** button in the stop mode winds the tape forward at high speed. Then the display ▶▶ will appear on the screen.

If you press and hold the **FF/** button in this mode, the searching picture will appear. This enables you to see what is on the tape. To return to the FF mode, release the **FF/** button.

If the tape winds forward to the end, it will automatically stop, rewind to the beginning and then eject the tape.

Reverse search

Press the **REW/** button during playback.

The display will appear and the tape will play in reverse faster than normal speed. Press the **PLAY** button to return to normal playback.

Pressing the **REW/** button in the stop mode rewinds the tape backward at high speed. Then the display ◀◀ will appear on the screen.

If you press and hold the **REW/** button in this mode, the searching picture will appear. This enables you to see what is on the tape. To return to the REW mode, release the **REW/** button.

Note : *Sound is automatically muted during these operations.*

VCR operation

Clock/count selection

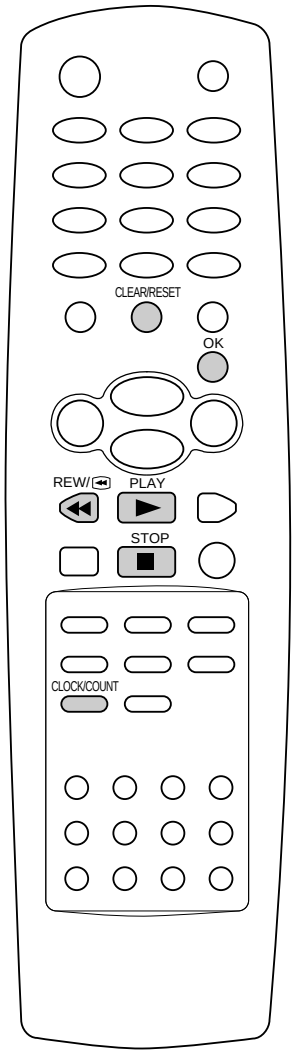
Each time the **CLOCK/COUNT** button is pressed, the current time and the tape counter appears alternately.
The tape counter displays the tape travel time in hours, minutes and seconds during recording and playback.

Note : *To reset the counter to* ***0:00:00****, press the* ***CLEAR/ RESET*** *button.*

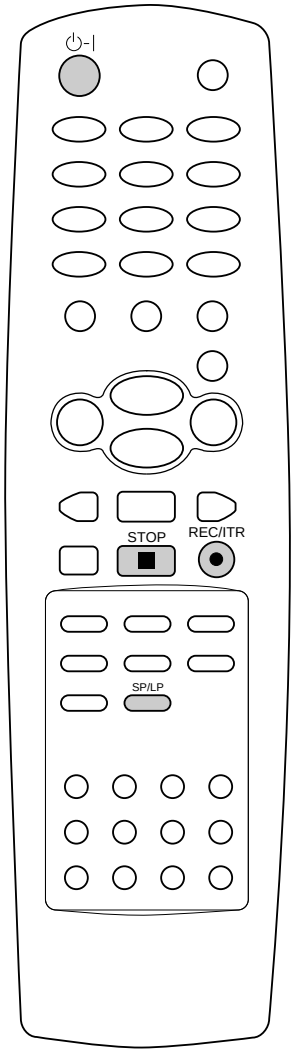
Memory stop

The memory stop makes it easy to return to a particular spot on the tape after recording or playback. The tape automatically stops when the counter reaches **M 0:00:00**.

1. Start recording or playback.
2. Press the **OK** button twice to keep on displaying the current time or the tape counter.
3. Press the **CLOCK/COUNT** button to display the tape counter.
4. Press the **CLEAR/RESET** button at the point you want to review. The counter displays **M 0:00:00**.
5. Press the **STOP** button when you finish recording or playing the tape.
6. Press the **REW/⏪** button. The tape stops at the point **M 0:00:00**.
7. Press the **PLAY** button to play back the tape.



Recording



Manual recording

This is the function used to record a TV programme or signal from external equipment onto a video cassette tape. The set cannot record any programme in the NTSC system as the NTSC system is only for playback.

1. Insert a tape with the safety tab into the cassette compartment.
   Note : *Select the recording tape speed* ***SP*** *or* ***LP*** *with the* ***SP/LP*** *button after inserting a tape with the safety tab.*
   You'd better select the tape speed ***SP****.*
2. Press the **REC/ITR** button once. The display ⏺ appears on the screen. The REC/ITR indicator will illuminate.
3. When the desired recording is completed, press the **STOP/ ■** button. If the tape reaches the end before you press the **STOP/ ■** button, the set automatically stops, rewinds to the beginning and ejects the tape.

Note :

a. If you try to record a tape without a safety tab, it will be automatically ejected to prevent accidental erasure. If you want to use the tape without the safety tab, stick a small piece of tape over the safety tab hole.

b. If you don't wish to monitor while recording, press the ⏻-I button.

WARNING

Unauthorized recording of copyrighted programmes, films, video tape and other materials may infringe upon the right of copyright owners and be contrary to copyright laws.

Instant timer recording (ITR)

This function is convenient when you want to start recording immediately without going through the entire timer setting procedure. You don't have to set the time to use this function.

1. Insert a tape with a safety tab.
2. Press the **REC/ITR** button twice.
   The display ⏺ will appear with the recording programme number. **ITR 0:00**
3. Repeatedly press the **REC/ITR** button to set the recording length, which appears on the screen. You can select up to 9 hours at 30-minute intervals.

After recording for the preset time, the set switches to standby.

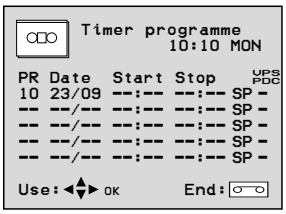
To cancel the ITR function, press the **REC/ITR** button until the display **ITR 0:00** appears.

Recording

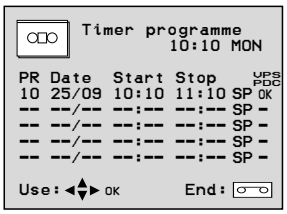
Timer programme setting

You can programme the set to start and end recording while you are away. Up to 5 recordings within one month can be programmed at the same time.

1. Press the **TIMER PROG** button on the remote control handset to display the **Timer programme** menu. The current time and the day of the week automatically appears under the display **Timer programme**.
2. Press the ▲ / ▼ button to select a recording item.
3. Select **PR** with the ▶ button and set the programme number with the ▲ / ▼ button.
4. Select **Date** with the ▶ button and set a Day/Month with the ▲ / ▼ button.
   If the date is September 23, the **Timer programme** mode appears as shown below.

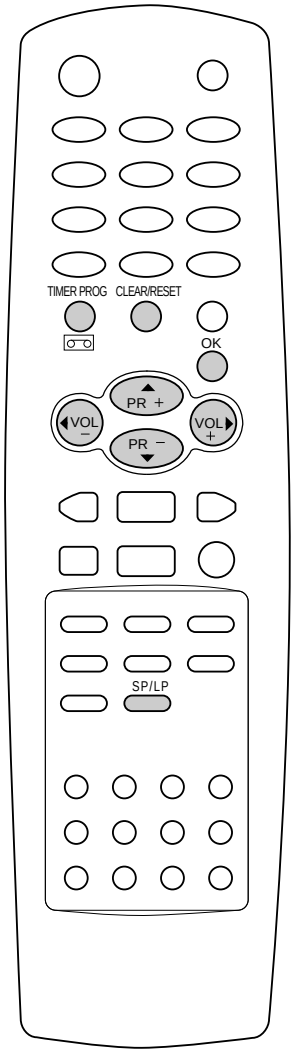


   Each time you press the ▲ button, the date changes as shown below.
   24/09 → 25/09 ··· 30/09 → 01/10 → 02/10 ··· 23/10
   Each time you press the ▼ button, the date changes as shown below.
   Every Day → SUN → MON ··· SAT → MON-SAT
   SAT-SUN ← MON-FRI ←
5. Select **Start** with the ▶ button.



   And set the start Hour : Minute with the ▲ / ▼ or ◄ / ► button.
6. Select **Stop** with the ▶ button and set stop Hour : Minute with the ▲ / ▼ or ◄ / ▶ button.
7. Select the tape speed position with the ▶ button and select the recording tape speed **SP** or **LP** with the **SP/LP** or ▲ / ▼ button.
8. Select **VPS PDC** with the ▶ button and set **OK** with the ▲ / ▼ button.
   Option : In some models, **VPS PDC** is not displayed. Only a set with teletext option can perform this function.
9. Press the **OK** button.
10. Press the **TIMER PROG** button to return to normal TV viewing.

After you finish programming, insert a tape with a safety tab. The TIMER REC indicator will illuminate.



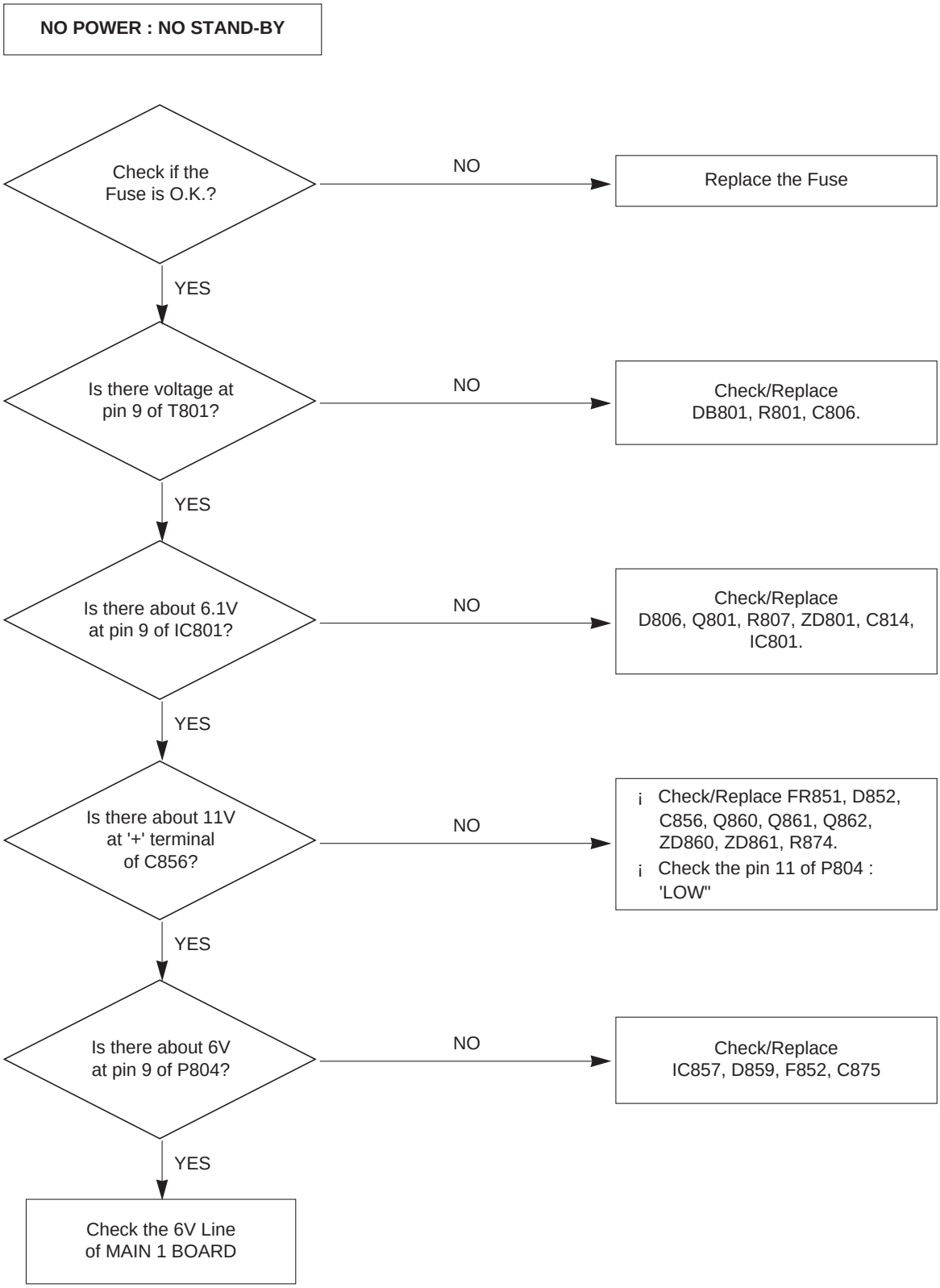
Note :

*a. If you want to cancel a timer programme, select the recording item with the ▲ / ▼ button, press the ◄ / ► button and then press the **CLEAR/RESET** button.*

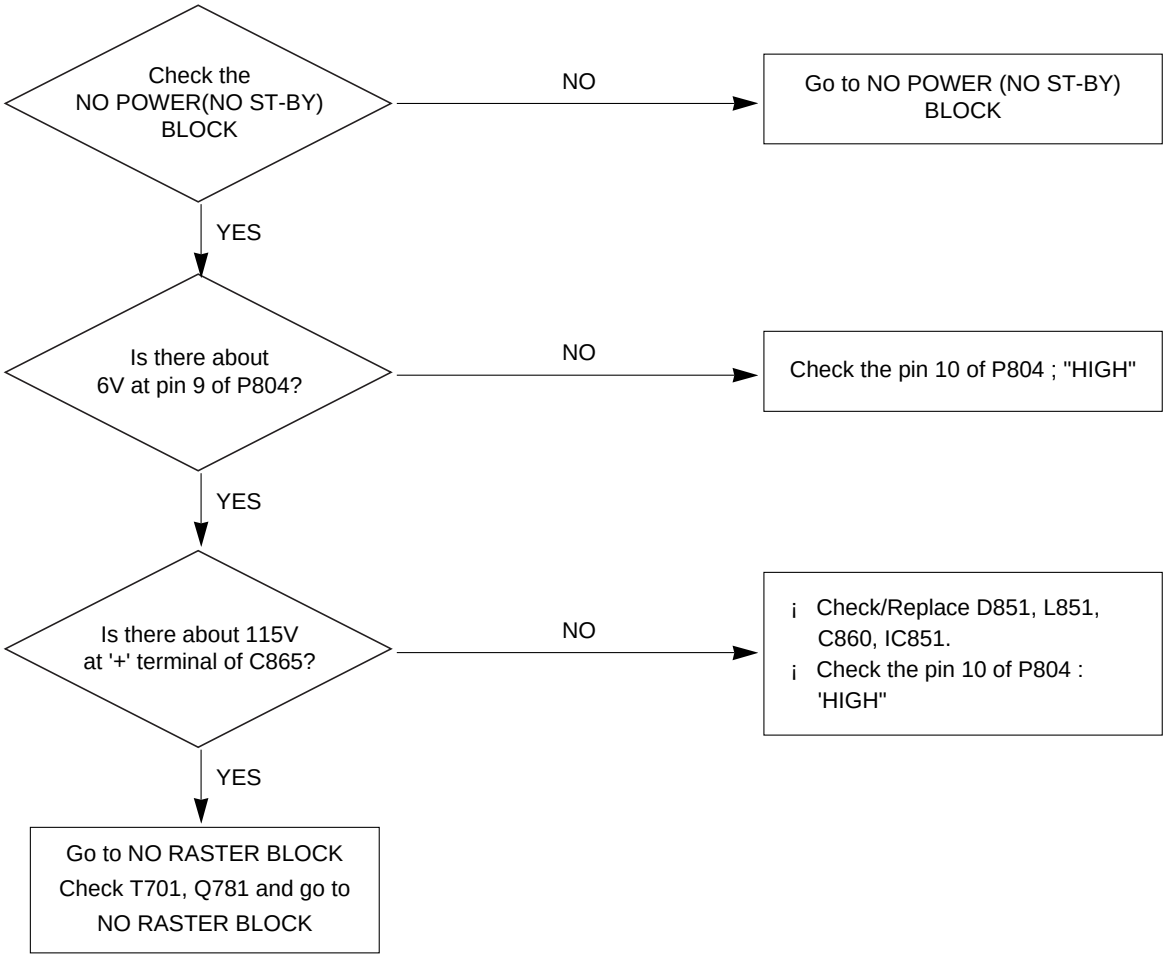
*b. If you press the **OK** button after pressing an incorrect digit accidently or setting the start and stop time that have already past, the recording will automatically be erased.*

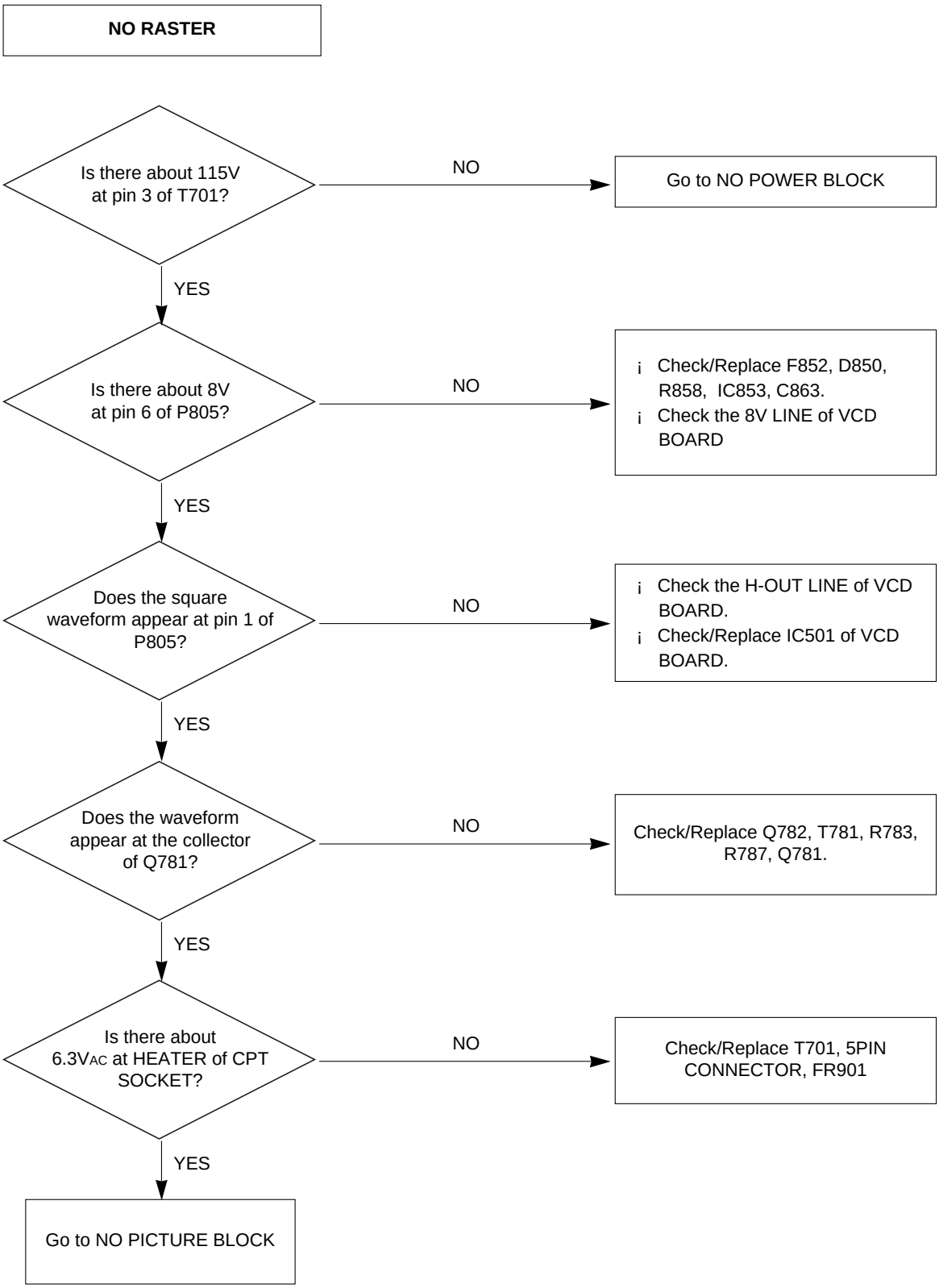
c. If the clock has not yet been set, when you try to set timer programme the MENU 4 will appear. Set the time and date before proceeding.

TROUBLE SHOOTING

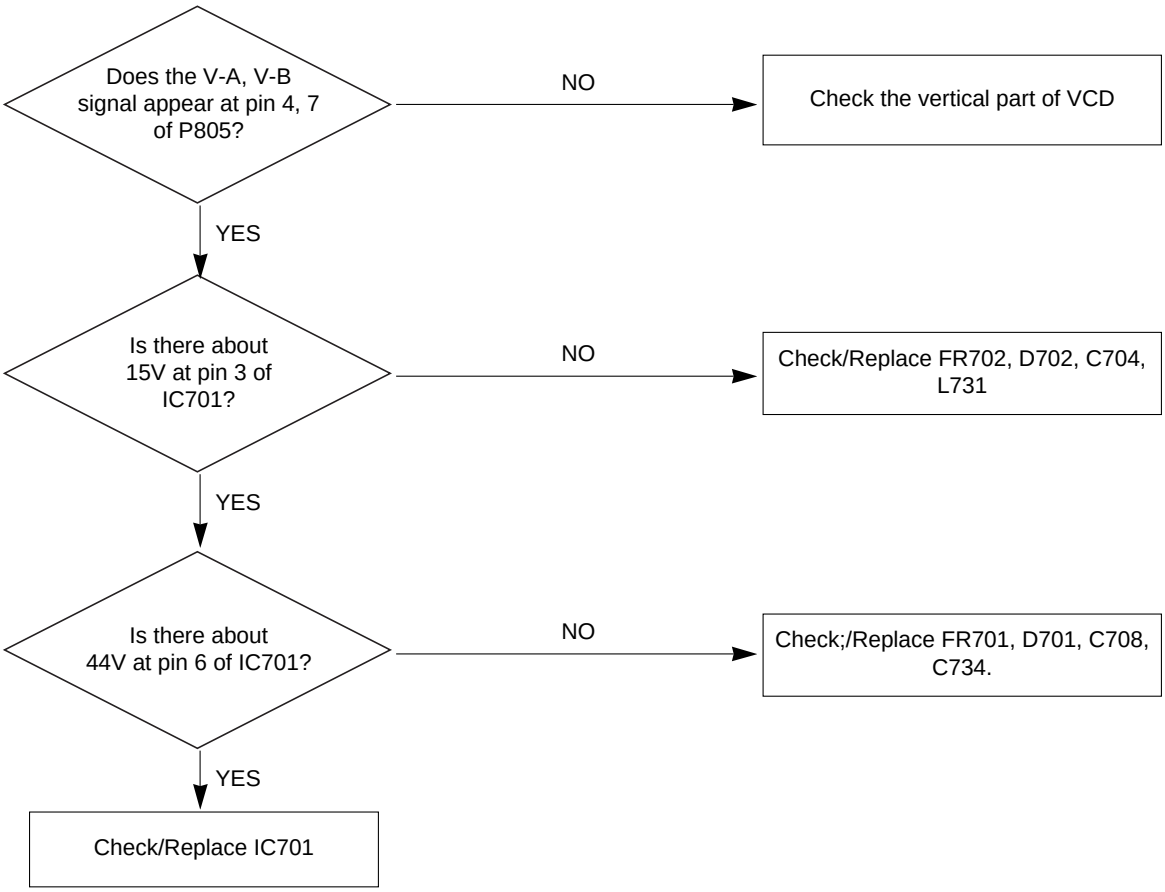

NO POWER : NO STAND-BY
Check if the Fuse is O.K.?
NO
Replace the Fuse
YES
Is there voltage at pin 9 of T801?
NO
Check/Replace DB801, R801, C806.
YES
Is there about 6.1V at pin 9 of IC801?
NO
Check/Replace D806, Q801, R807, ZD801, C814, IC801.
YES
Is there about 11V at '+' terminal of C856?
NO
¡ Check/Replace FR851, D852, C856, Q860, Q861, Q862, ZD860, ZD861, R874.
¡ Check the pin 11 of P804 : 'LOW"
YES
Is there about 6V at pin 9 of P804?
NO
Check/Replace IC857, D859, F852, C875
YES
Check the 6V Line of MAIN 1 BOARD

NO POWER : NO MONITOR ON

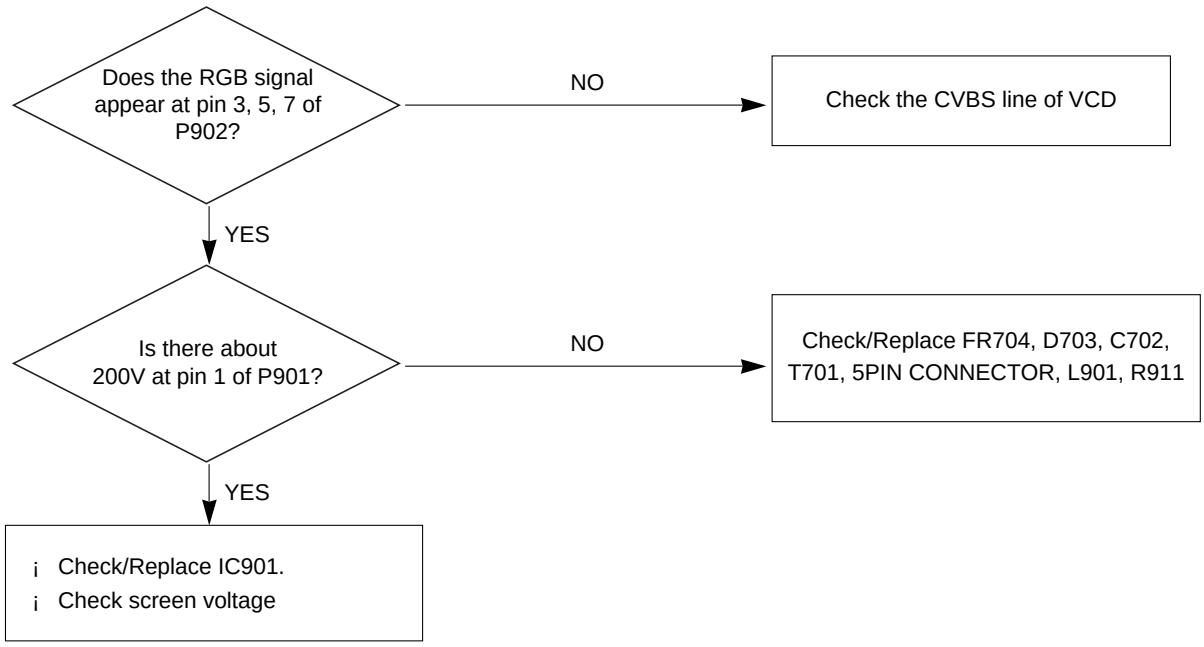


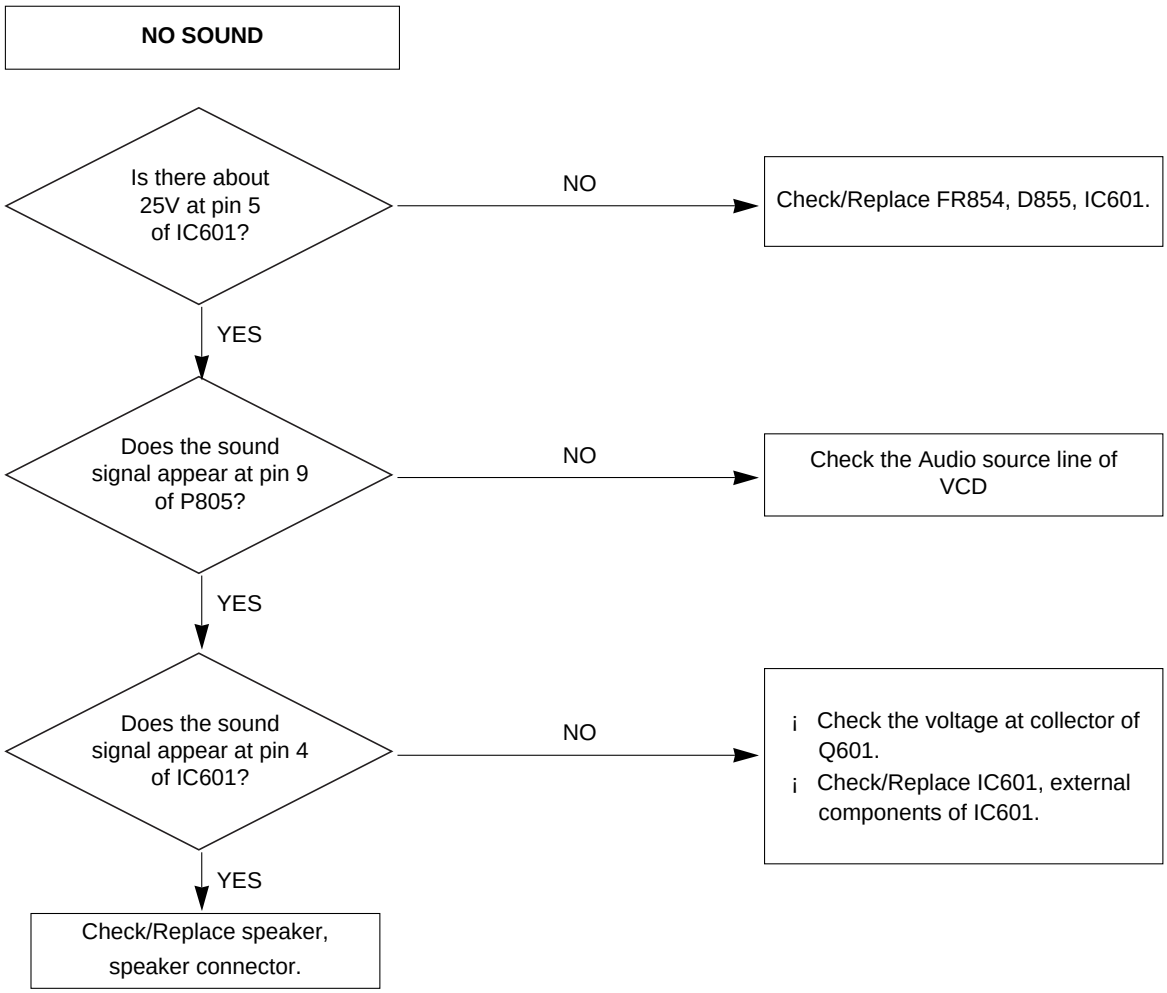

NO RASTER
Is there about 115V at pin 3 of T701?
NO
Go to NO POWER BLOCK
YES
Is there about 8V at pin 6 of P805?
NO
¡ Check/Replace F852, D850, R858, IC853, C863.
¡ Check the 8V LINE of VCD BOARD
YES
Does the square waveform appear at pin 1 of P805?
NO
¡ Check the H-OUT LINE of VCD BOARD.
¡ Check/Replace IC501 of VCD BOARD.
YES
Does the waveform appear at the collector of Q781?
NO
Check/Replace Q782, T781, R783, R787, Q781.
YES
Is there about 6.3VAC at HEATER of CPT SOCKET?
NO
Check/Replace T701, 5PIN CONNECTOR, FR901
YES
Go to NO PICTURE BLOCK

V. Deflection ERROR

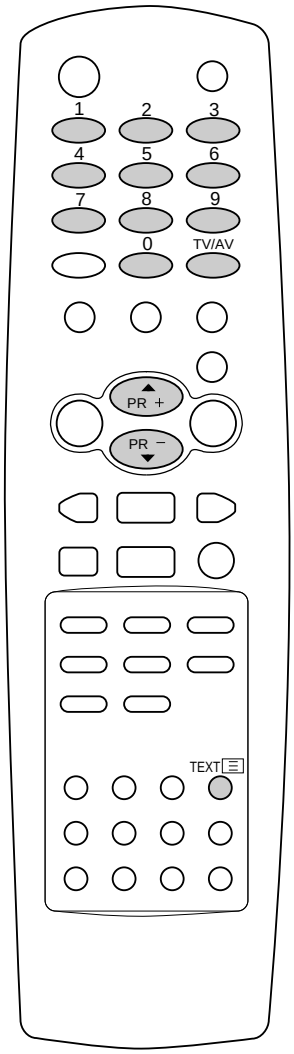

Does the V-A, V-B signal appear at pin 4, 7 of P805?
NO
Check the vertical part of VCD
YES
Is there about 15V at pin 3 of IC701?
NO
Check/Replace FR702, D702, C704, L731
YES
Is there about 44V at pin 6 of IC701?
NO
Check;/Replace FR701, D701, C708, C734.
YES
Check/Replace IC701

NO PICTURE


Does the RGB signal appear at pin 3, 5, 7 of P902?
NO
Check the CVBS line of VCD
YES
Is there about 200V at pin 1 of P901?
NO
Check/Replace FR704, D703, C702, T701, 5PIN CONNECTOR, L901, R911
YES
¡ Check/Replace IC901.
¡ Check screen voltage


NO SOUND
Is there about 25V at pin 5 of IC601?
NO
Check/Replace FR854, D855, IC601.
YES
Does the sound signal appear at pin 9 of P805?
NO
Check the Audio source line of VCD
YES
Does the sound signal appear at pin 4 of IC601?
NO
¡ Check the voltage at collector of Q601.
¡ Check/Replace IC601, external components of IC601.
YES
Check/Replace speaker, speaker connector.

Teletext (option)



Teletext is an optional function, therefore only a set with the teletext system can receive the teletext broadcast.

Teletext is a free service broadcast by most TV stations which gives up-to-the-minute information on news, weather, television programmes, share prices and many other topics.

The teletext decoder of this TV can support the SIMPLE, TOP and FASTEXT systems. SIMPLE (standard teletext) consists of a number of pages which are selected by directly entering the corresponding page number. TOP and FASTEXT are more modern methods allowing quick and easy selection of teletext information.

Switch on/off

Press the **TEXT** button to switch to teletext. The initial page or last selected page appears on the screen.
Two page numbers, TV station name, date and time are displayed on the screen headline. The first page number indicates your selection, while the second shows the current page displayed.
Press the **TEXT** or **TV/AV** button to switch off teletext. The previous mode reappears.

SIMPLE text

Page selection

1. Enter the desired page number as a three digit number with the NUMBER buttons. If during selection you press a wrong number, you must complete the three digit number and then re-enter the correct page number.
2. The ▲ / ▼ button can be used to select the preceding or following page.

Teletext (option)

TOP text

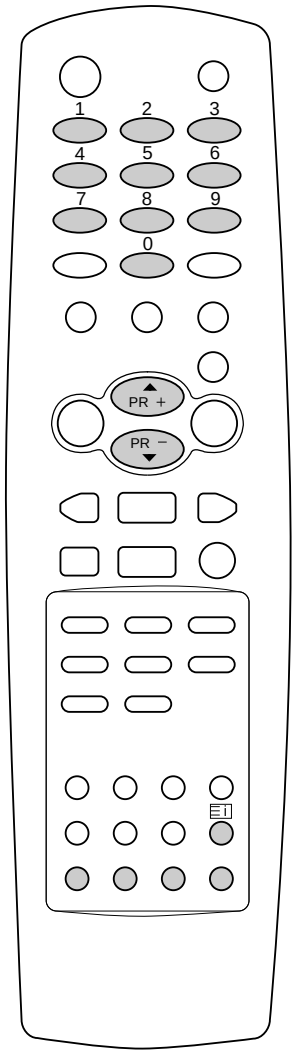
The user guide displays four fields-red, green, yellow and blue at the bottom of the screen. The yellow field denotes the next group and the blue field indicates the next block.

Group/block/page selection

1. With the BLUE button you can progress from block to block.
2. Use the YELLOW button to proceed to the next group with automatic overflow to the next block.
3. With the GREEN button you can proceed to the next existing page with automatic overflow to the next group. Alternatively the ▲ button can be used.
4. The RED button permits to return to previous selection. Alternatively the ▼ button can be used.

Direct page selection

Corresponding to the SIMPLE teletext mode, you can select a page by entering it as a three digit number using the NUMBER buttons in TOP mode.



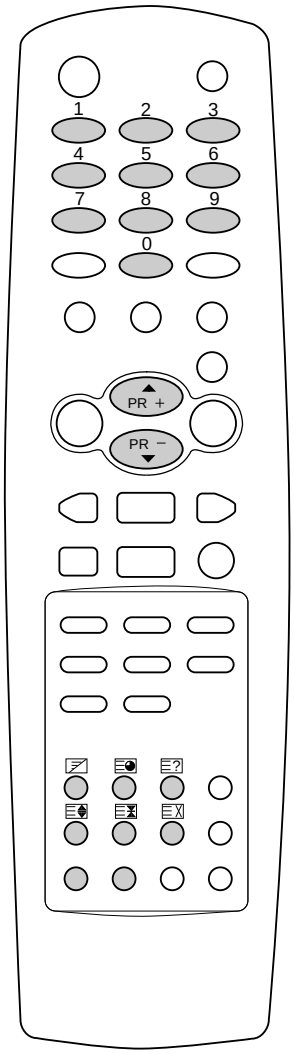
FASTEXT

The teletext pages are colour coded along the bottom of the screen and are selected by pressing the corresponding coloured button.

Page selection

1. Press the button to select the index page.
2. You can select the pages which are colour coded along the bottom line with the same coloured buttons.
3. Corresponding to the SIMPLE teletext mode, you can select a page by entering its three digit page number with the NUMBER buttons in FASTEXT mode.
4. The ▲ / ▼ button can be used to select the preceding or following page.

Teletext (option)



Special teletext functions

REVEAL
Press this button to display concealed information, such as solutions of riddles or puzzles.
Press this button again to remove the information from the display.

EXPAND
Selects double height text.
Press this button to enlarge the top half of the page.
Press this button again to enlarge the bottom half of the page.
Press this button again to return to the normal display.

UPDATE
Displays the TV picture on the screen while waiting for the new teletext page. The display will appear at the top left hand corner of the screen. When the updated page is available then display will change to the page number.
Press this button to view the updated teletext page.

HOLD
Stops the automatic page change which will occur if a teletext page consists of 2 or more sub pages. The number of sub pages and the sub page displayed is, usually, shown on the screen below the time. When this button is pressed the stop symbol is displayed at the top left-hand corner of the screen and the automatic page change is inhibited.
To continue press this button again.

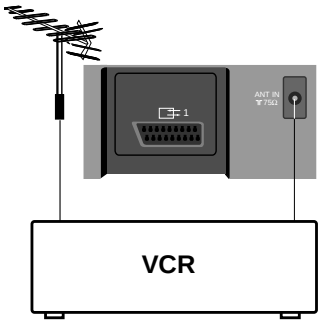
MIX
Displays the teletext pages superimposed on the TV picture.
To switch the TV picture off press this button again.

TIME
When viewing a TV programme, press this button to display the time at the top right hand corner of the screen. Press this button again to remove the display. In the teletext mode, press this button to select a sub page number. The sub page number is displayed at the bottom of the screen. To hold or change the sub page, press the RED/GREEN, ▲ / ▼ or NUMBER buttons. Press again to exit this function.

Connection of external equipment

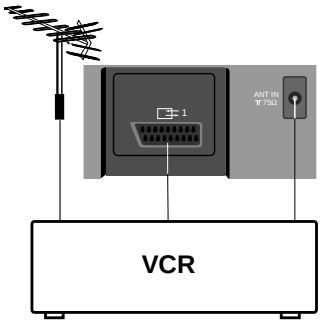
You can connect additional equipment, such as external VCRs, camcorders, etc. to your set. Here shown may be somewhat different from your set.

Aerial socket



1. Connect the RF out socket of the external VCR to the aerial socket on the back of the set.
2. Connect the aerial cable to the RF aerial in socket of the external VCR.
3. Store the external VCR channel on a desired programme number using the 'Manual programme tuning' section.
4. Select the programme number where the external VCR channel is stored.
5. Press the **PLAY** button on the external VCR.

Euro scart socket

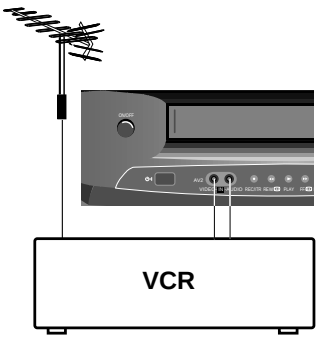


1. Connect the euro scart socket of the external VCR to the Euro scart socket 1 on the set.
2. Press the **PLAY** button on the VCR.
   If your VCR outputs a switching voltage connect to Euro scart socket, the set will switch to **AV 1** mode automatically. But if you want to keep on watching TV mode, press the ▲ / ▼ or NUMBER buttons.
   Otherwise, press the **TV/AV** button on the remote control handset to select **AV1**. The external VCR playback picture appears on the screen.

   You can also record programmes received by the TV on video tape.

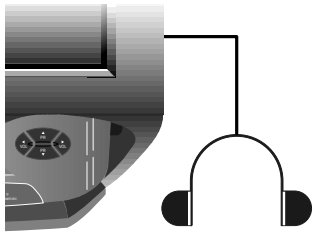
   You can dub the recording of the external VCR by pressing the **REC/ITR** button on the set or remote control handset.

Audio/Video in sockets



1. Connect the audio/video out sockets of the external VCR to the audio/video sockets on the front.
2. Press the **TV/AV** button to select **AV2**.
3. Press the **PLAY** button on the external VCR.
   The external VCR playback picture appears on the screen.

Headphone socket (option)



Insert the headphone plug to the headphone socket on the left side of the set. You can listen to the sound from the headphones and no sound is heard from the speaker of the set.

Troubleshooting check list

IN TV/VCR RECEPTION

Symptoms	*Check Points*
No picture or sound	Make sure the unit is plugged into a working AC power socket. Check that the power is switched to 'ON'. Check aerial is properly connected along with any other connections. If an indoor aerial is used, see it is pointing in the right direction.
Picture OK; sound poor	Check aerial is properly connected, If an indoor aerial is used, see it is pointing in the right direction. Adjust the volume.
Sound OK; no picture	Try another channel: it might be a transmitter fault. Adjust the picture.
Picture faint or blurred	Check aerial is properly connected. If an indoor aerial is used, see it is pointing in the right direction. Adjust the CONTRAST control.
Picture rolls vertically	Check aerial is properly connected. If an indoor aerial is used, see it is pointing in the right direction.
Ghosts or multiple images	Check aerial is properly connected. If an indoor aerial is used, see it is pointing in the right direction. Suspect reception interference and fit a directional or external aerial.
Wrong colour or no colour	Adjust the COLOUR control.
No response to pressing front control buttons	Press the buttons again carefully. If no response, unplug the set from the mains socket, and then plug it in and try again.
No response to remote control	Check the batteries are fitted in right way round. Replace the batteries.

IN TV/VCR OPERATION

Symptoms	*Check Points*
The tape insertion is impossible	Insert the tape with the window side up and the safety tab facing you. See that there isn't a tape in the machine already.
Auto play function won't work	Check that the safety tab on the video cassette tape is removed.
TV programmes cannot be recorded	Have you tuned the set's channels properly? See that the safety tab on the video cassette is still intact. Check the aerial and its connections.
Timer recording can't be done	Set the recording start/stop time correctly. Has there been a power supply interruption before or during Timer recording? If so, the timer will have lost details of the instructions you gave it and it will not function. Try reprogramming again.
There is no picture in playback: the playback picture is of poor quality or is streaky	Check that the video cassette tape has been recorded on. Adjust the Tracking Control (This should remove 'streaks') Clean the Heads of TVCR.
VCR button does not operate	Reconnect the mains plug to a power socket: reset programmes (problem caused by a power interruption). Check that the timer programme is set for recording.
Video cassette tape jammed in its slot	If the tape is inserted the wrong way it may become stuck. Wait a few seconds to see if the machine will automatically eject it. If it does not, and the machine stops working, on no account try free it but contact your local dealer.

LG Electronics

GUARANTEE

- LG Electronics U.K. Ltd. will provide the following services in order to expedite this Guarantee.

1. All faulty components which fail due to defective manufacture will be replaced free of charge for a period of 12 months from the original date of purchase.

2. The dealer (or his service agent) who sold the product will be reimbursed for any labour provided in the repair of this LG equipment, for a period of 12 months from the original date of purchase. These claims must be made in accordance with the published scale of service charges and relevant claims procedure.

PLEASE NOTE:

A. The dealer may restrict the guarantee to the original purchaser.
B. The dealer is not obliged to carry out service under guarantee if unauthorized modifications are made to the apparatus, or if non standard components are used or if the serial number of the apparatus is removed, defaced, misused, or altered.
C. Any claims made under guarantee must be directed to the dealer from whom the equipment was originally purchased. The dealer may, before carrying out service under guarantee, require a receipted account as evidence of the date of purchase.
D. We respectfully point out that your dealer is not obligated to replace batteries if they become exhausted or worn in use.
E. Aerial alignment and consumer control adjustments are not covered by this guarantee.

This guarantee does not affect your statutory rights.

- REQUIREMENTS TO MAINTAIN WARRANTY COVERAGE:

RETAIN YOUR RECEIPT TO PROVE DATE OF PURCHASE. A COPY OF YOUR RECEIPT MUST BE SURRENDERED AT THE TIME GUARANTEE SERVICE IS PROVED.

- Product Registration Card: It is helpful to complete at least your name, address, phone, model & serial numbers and return it. This will enable LG to assist you in the future should you lose your receipt, your units be stolen, or should modifications be necessary.
- To obtain information or assistance: Call 0870 607 5544 Monday-Friday 9.00am-4.30pm.

MODEL NO.*	SERIAL NO.*	DATE OF PURCHASE *

* Please complete for your own record

In all cases of difficulty - consult your LG dealer from whom the product was purchased

REPLACEMENT PARTS LIST

1. Mechanical Section

NSP : Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
				ASSEMBLY PARTS SECTION		
		A00	6721R-0105A	DECK ASSY	D33 (2HD, NP, VCR)	
		A01	6723R-0101B	DRUM ASSY	D33-2CH SP/EP (5M2)	
	OR	A01	6723R-B101B	DRUM(CIRC) ASSY	D33-2CH SP/EP (5M2)	
	OR	A01	6723R-D101B	DRUM(CIRC) ASSY	D33-2CH SP/EP (5M2)	
		A02	4261R-0012A	ARM ASSY	T/UP	
		A03	4261R-0003A	ARM ASSY	CLEANER	
		A04	4811R-0011A	BRACKET ASSY	L/D MOTOR	
		A11	4470R-0028A	GEAR ASSY	P3	
		A12	4470R-0026A	GEAR ASSY	P2	
		A21	4931R-0015A	HOLDER ASSY	CST	
		A22	4811R-0014A	BRACKET ASSY	DOOR	
		A23	4261R-0010A	ARM ASSY	F/L	
		A24	4510R-0019A	LEVER ASSY	SWITCH	
				PARTS SECTION		
		001	6723R-0104B	DRUM ASSY	SUB D33-2CH SP/EP (5M2)	
		002	4680RB0004A	MOTOR(MECH)	DRUM F2OEL-81 SANKYO D33	
	OR	002	4680RB0005A	MOTOR(MECH)	DRUM GVD-033A LGEC D33	
		003	4930R-0106A	HOLDER	FPC(2CH)	
		004	5006R-0014A	CAP	FPC	
		005	276-100A	CAP	A CLEANER	NSP
		006	434-242A	ROLLER	CLEANER	NSP
		007	4260R-0009A	ARM	CLEANER	NSP
		008	4970R-0043A	SPRING	T/UP	
		009	4260R-0011A	ARM	T/UP	
		010	4770R-0004A	BAND(MECH) ASSY	TENSION	
		011	4261R-0004A	ARM ASSY	TENSION	
		012	3041R-0003A	BASE ASSY	P2	
	OR	012	3041R-0003B	BASE ASSY	P2 (D/C)	
		013	3041R-0004A	BASE ASSY	P3	
	OR	013	3041R-0004B	BASE ASSY	P3 (D/C)	
		014	3041R-0007A	BASE ASSY	P4	
		015	5870R-0001A	OPENER	LID	
		016	3041R-0005A	BASE ASSY	A/C HEAD(LGEC)	
		017	4408R-0001A	REEL	S	
		018	4970R-0054A	SPRING	SB	
		019	4421R-0003A	BRAKE ASSY	S	
		020	4970R-0053A	SPRING	TB	
		021	4421R-0004A	BRAKE ASSY	T	
		022	523-833B	HEAD	FE D33. LG C&D/ST	
		023	4980R-0010A	SUPPORTER	CST	
		024	4261R-0008A	ARM ASSY	IDLER	
		025	4810R-0053A	BRACKET	L/D MOTOR	NSP
		026	4681R-0007A	MOTOR ASSY	L/D	NSP
		027	4470R-0025A	GEAR	WHEEL	NSP
		028	4408R-0002A	REEL	T	
		029	4261R-0011A	ARM ASSY	PINCH (MOLD BEARING)	
		031	4970R-0052A	SPRING	TENSION	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		032	3141R-0002A	CHASSIS ASSY	D33	NSP
		051	4400R-0005A	BELT	CAPSTAN	
		052	4680RA0002A	MOTOR(MECH)	CAPSTAN F2QSB SANKYO D33	
	OR	052	4680RA0003A	MOTOR(MECH)	CAPSTAN GVC-033A LGEC D33	
		053	4974R-0018A	GUIDE	RACK F/L	
		054	4470R-0037A	GEAR	RACK F/L	
		055	4470R-0033A	GEAR	DRIVE	
		056	4470R-0032A	GEAR	CAM	
		057	4470R-0036B	GEAR	CONNECT	
		060	4510R-0025A	LEVER	F/R	
		061	4265R-0002A	CLUTCH ASSY	D33	
		062	4470R-0044A	GEAR ASSY	UP/D	
		063	4970R-0051A	SPRING	UP/D	
		064	4470R-0034A	GEAR	SECTOR	
		065	4510R-0016A	LEVER	P3	NSP
		066	4970R-0046A	SPRING	L/D	NSP
		067	4470R-0029A	GEAR	P3	NSP
		068	4470R-0027A	GEAR	P2	NSP
		069	4970R-0046A	SPRING	L/D	NSP
		070	4510R-0015A	LEVER	P2	NSP
		077	3300R-0157A	PLATE	SLIDER	
		078	4510R-0022A	LEVER	TENSION	
		079	3040R-0018A	BASE	TENSION	
		100	3301R-0029A	PLATE ASSY	TOP	
		101	4810R-0056A	BRACKET	SIDE(L)	
		102	4510R-0023A	LEVER	STOPPER(L)	NSP
		103	4930R-0099A	HOLDER	SIDE(L)	NSP
		104	4974R-0019A	GUIDE	CST	
		105	4930R-0098A	HOLDER	CST	NSP
		106	4930R-0100A	HOLDER	SIDE(R)	NSP
		107	4510R-0024A	LEVER	STOPPER(R)	NSP
		108	4810R-0055A	BRACKET	SIDE(R)	NSP
		109	5870R-0002A	OPENER	DOOR	NSP
		110	4260R-0018A	ARM	F/L(L)	NSP
		111	4970R-0055A	SPRING	F/L(L)	NSP
		112	3070R-0001A	BODY	F/L	NSP
		113	4970R-0056A	SPRING	F/L(R)	NSP
		114	4260R-0019A	ARM	F/L(R)	NSP
		115	4970R-0050A	SPRING	SWITCH	
		116	4510R-0020A	LEVER	SWITCH	
SCREW						
		401	1MPK0261418	PAN HEAD MACHINE SCREW +, -	+ D2.6 L4.0 MSWR3/FZY	
		406	1MEC0302018	PAN HEAD MACHINE SCREW S/W+	D3.0 L6.0 MSWR3/FZY	
		407	1APF0201718	SCREW TAP TITE(B), PAN HEAD	+ D2.0 L5.0 MSWR3/FZY	
		409	1MGC0302418	PAN HEAD MACN SCREW S/P WASH +	D3.0 L8.0, MSWR3/FZY	
		410	1APF0262218	SCREW TAP TITE(B), PAN HEAD	+ D2.6 L6.8 MSWR3/FZY	
		426	1MPC0302018	PAN HEAD MACHINE SCREW +!	D3.0 L6.0 MSWR3/FZY	
NUT, WASHER						
		504	354-001B	WASHER	P.S D3.1XD6X0.5T	
		517	1WZZR-0004B	WASHER	STOPPER	
		518	1WZZR-0004A	WASHER	STOPPER	

The components identified by mark ⚠ is critical for safety.
Replace only with part number specified.

REPLACEMENT PARTS LIST

LOCA. NO	PART NO	DESCRIPTION
	IC	
IC01	0IGS899603A	IC,LG8996-03A *LANG E/D/F
"	0IGS899602A	IC,LG8996-02A *LANG E/I/S
IC01S	0ITO123800A	IC,TA1238N SECA
IC02	0ISG241600A	IC,ST24C16 8D EEPROM(16K)
IC03	0ISS753300A	IC,KA7533Z RESET T0-92 TP 3.3V
IC04	0ISS753300A	IC,KA7533Z RESET T0-92 TP 3.3V
IC05	0ISA164500B	IC,LB1645N 10SIP BK MOTOR DRIVE I
IC06	0IMI350410R	IC,M35041-091FP 20SOP TP OSD
IC100	0ITF448800A	IC,U4488B 16DIP BK SIF+AM DEMODUL
IC101	0ISG405200B	IC,HCF4052BE 16P,DIP BK DIFF-4CH
IC200	0ISA701600A	IC,LA7016 8S ANALOG S/W
IC201	0ISA701600A	IC,LA7016 8S ANALOG S/W
IC202	0ISA722200A	IC,LA7222 12S ANALOG S/W(2CH)
IC301	0ISA715910A	IC,LA71591M 100QFP BK AVCP 1CHIP
IC500	0IPH884212A	IC,TDA8842(S1)/N2 56P,SDIP BK MUL
IC601	0ISG200600A	IC,TDA2006 5Z 1CHX10W AUDIO AMP.
IC701	0IPH835150A	IC,TDA8351/N6 9P,SIP BK V/OUT(W/O
IC801	0ISK670700B	IC,STR/S6707(LF.953) 9P (R5,R6)
⚠ IC802	0ISH123200B	IC,PC123 FY2PHOTO COUPLER
⚠ IC803	0ISH123200B	IC,PC123 FY2PHOTO COUPLER
IC851	0ISK115000A	IC,SE115N(LF12) 3P 115V ERROR AMP
"(14")	0ISK110000A	IC,SE110N(LF12) 3P 110V ERROR AMP
IC852	0ISH052100A	IC,PQ05RF21 4P(TO-220) 5V S/W REG
IC853	0IKE780800A	IC,KIA7808PI 3P(TO-220IS) 1A,8V
IC855	0ISS781200H	IC,KA78R12 4P,TO-220F BK LOW DROP
IC856	0ISS781200H	IC,KA78R12 4P,TO-220F BK LOW DROP
IC857	0IKE780600B	IC,KIA7806PI TO-220IS 6V,1A
IC901	0IPH610700A	IC,TDA6107Q SIP9 BK VIDEO OUT AMP
	DIODE	
D01	0DD400309AD	DIODE,RECTIFIER IN4003A K-ROHM
D02	0DD400309AD	DIODE,RECTIFIER IN4003A K-ROHM
D03	0DD414809ED	DIODE,1N4148 TA
D04	0DD414809ED	DIODE,1N4148 TA
D05	0DD414809ED	DIODE,1N4148 TA
D07	0DD414809ED	DIODE,1N4148 TA
D18	0DD400309AD	DIODE,RECTIFIER IN4003A K-ROHM
D20	0DD414809ED	DIODE,1N4148 TA
D22	0DD414809ED	DIODE,1N4148 TA
D26	0DD400309AD	DIODE,RECTIFIER IN4003A K-ROHM
D100	0DD414809ED	DIODE,1N4148 TA
D101	0DD859009AA	DIODE,SILICON MA859
D102	0DD859009AA	DIODE,SILICON MA859
D301	0DD414809ED	DIODE,1N4148 TA
D500	0DD414809ED	DIODE,1N4148 TA
D501	0DD414809ED	DIODE,1N4148 TA
D502	0DD414809ED	DIODE,1N4148 TA
D503	0DD414809ED	DIODE,1N4148 TA
D504	0DD414809ED	DIODE,1N4148 TA
D505	0DD414809ED	DIODE,1N4148 TA
D506	0DD414809ED	DIODE,1N4148 TA
D507	0DD414809ED	DIODE,1N4148 TA

LOCA. NO	PART NO	DESCRIPTION
D509	0DD414809ED	DIODE,1N4148 TA
D510	0DD859009AA	DIODE,SILICON MA859
D511	0DD859009AA	DIODE,SILICON MA859
D512	0DD181009AB	DIODE,SWITCHING KDS181 85V 300MA
D601	0DD414809ED	DIODE,1N4148 TA
D602	0DD414809ED	DIODE,1N4148 TA
D603	0DD414809ED	DIODE,1N4148 TA
D701	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D702	0DD150009CA	DIODE,RECTIFIER RGP15J,TP(52MM)
D703	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D704	0DD414809ED	DIODE,1N4148 TA
D781	0DD150009CA	DIODE,RECTIFIER RGP15J,TP(52MM)
D805	0DD150009CE	DIODE,GP15J TP (1.5A/600V) GI
D806	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D807	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D808	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D809	0DD100009AL	DIODE,EH-1ZV(1)
D810	0DD414809ED	DIODE,1N4148 TA
D811	0DD414809ED	DIODE,1N4148 TA
D850	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D851	0DD560009AA	DIODE,BYT56M TEMIC TP TEMIC
D852	0DD100009AE	DIODE,RECTIFIER RU1A V(1)
D853	0DD420000BB	DIODE,D4L20U SHINDENGEN
D854	0DD420000BB	DIODE,D4L20U SHINDENGEN
D855	0DD360009AA	DIODE,BYW36 TP (2A/600V)
D858	0DD414809ED	DIODE,1N4148 TA
D859	0DD360009AA	DIODE,BYW36 TP (2A/600V)
D860	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D901	0DD400309AD	DIODE,RECTIFIER IN4003A K-ROHM
⚠ DB801	0DD260000BB	DIODE,BRIDGE D2SBA60(STK)
LD03	4931R-0017A	HOLDER ASSY,LED
LED01	162-002A	DIODE LED,A'SSY(DL-G11RA)
LED03	4930V00097A	HOLDER,LED ASSY(3P)
ZD01	0DZ680009BB	DIODE,ZENER MTZJ6.8B DO34 0.5W 6
ZD02	0DZ510009AB	DIODE,ZENER MTZ5.1B,TP(52MM),ROHM
ZD100	0DZ330009BA	DIODE,ZENER HZT33(TP)
ZD201	0DZ560009CF	DIODE,ZENER MTZJ5.6B DO34 0.5W 5
ZD202	0DZ560009CF	DIODE,ZENER MTZJ5.6B DO34 0.5W 5
ZD500	0DZ180009AG	DIODE,ZENER MTZJ18B DO34 500MW 1
ZD601	0DZ620009BB	DIODE,ZENER MTZJ6.2B DO34 0.5W 6
ZD701	0DZ820009AH	DIODE,ZENER MTZJ8.2B DO34 500MW
ZD702	0DZ820009AH	DIODE,ZENER MTZJ8.2B DO34 500MW
ZD801	0DZ680009BB	DIODE,ZENER MTZJ6.8B DO34 0.5W 6
ZD860	0DZ110009AD	DIODE,ZENER MTZJ11B DO34 500MW 1
ZD861	0DZ360009DA	DIODE,ZENER MTZ3.6B,(52MM) TP ROHM
ZD862	0DZ510009AB	DIODE,ZENER MTZ5.1B,TP(52MM),ROHM
ZD901	0DZ750009AG	DIODE,ZENER MTZJ7.5B DO34 0.5W 7
ZD902	0DZ750009AG	DIODE,ZENER MTZJ7.5B DO34 0.5W 7
ZD903	0DZ750009AG	DIODE,ZENER MTZJ7.5B DO34 0.5W 7
ZD904	0DZ750009AG	DIODE,ZENER MTZJ7.5B DO34 0.5W 7
	TRANSISTOR	
Q02S	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC

R.P.L

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RN : Metal Film
RF : Fusible

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LOCA. NO	PART NO	DESCRIPTION
Q03	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q03S	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q04	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q07	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q08	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q100	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q104	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q105	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q106	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q108	0TR388109AA	TR,KTC3881 CHIP KEC
Q109	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q110	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q111	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q112	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q112	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q113	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q113	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q200	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q201	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q202	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q203	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q204	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q205	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q206	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q207	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q208	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q300	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q301	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q303	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q304	0TR320509AB	TR,KTC3205-Y (KTC2236A) TP KEC
Q305	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q306	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q307	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q308	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q309	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q312	0TR126609AA	TR,KTA1266-Y (KTA1015) TP KEC
Q500	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q501	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q502	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q504	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q505	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q506	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q507	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q508	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q509	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q510	0TR102009AG	TR,CHIP KRC102S SOT-23 TP KEC
Q601	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q602	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q781	0TR249900AA	TR,KTD2499 TO-3P(H)IS TOSHIBA
"(14")"	0TR570200AA	TR,KSD5702 BK
Q782	0TR320709AA	TR,KTC3207,TP(KTC2482),KEC
Q801	0TR385200AA	TR,2SC3852A SANKEN
Q850	0TR102409AB	TR,KTA1024-Y (KTA949) TP KEC

LOCA. NO	PART NO	DESCRIPTION
Q851	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q853	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q854	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q860	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q861	0TR322809AA	TR,KTC3228-0 TP(KTC2383),KEC
Q862	0TR968000AA	TR,KTA968A-Y KEC

CAPACITOR

C04S	0CC1500K415	15P 50V J
C05S	0CE107DF618	100UF STD 16V M
C06	0CE3363F618	33UF SRE 16V M
C07	0CN2230H949	22000P 25V Z
C08S	0CE225DK618	2.2000UF STD 50V M
C09	0CE2263F618	22UF SRE 16V M
C10	0CC1800K415	18P 50V J
C11	0CC1800K415	18P 50V J
C12S	0CE107DF618	100UF STD 16V M
C14S	0CE474DK618	0.4700UF STD 50V M
C16	0CE4763F618	47UF SRE 16V M
C16S	0CN1030F679	10000P 16V M
C17S	0CE474DK618	0.4700UF STD 50V M
C19S	0CE106DF618	10UF STD 16V M
C32	0CE4753K618	4.7UF SRE 50V M
C36	0CQ4731N509	0.047U 100V K
C37	0CN1040K949	0.1M 50V Z
C38	181-007C	ECQ-V1H104JZ3(TR),50V 0.1
C39	0CE4753K618	4.7UF SRE 50V M
C45	0CE107DF618	100UF STD 16V M
C47	0CE1074F618	100UF SRA 16V M
C48	0CE477DF618	470UF STD 16V M
C50	0CE4763F618	47UF SRE 16V M
C51	0CN1040K949	0.1M 50V Z
C52	0CE4763F618	47UF SRE 16V M
C53	0CE4763F618	47UF SRE 16V M
C54	181-002B	SUPER CAP.FSOH473Z
C55	0CQ3332K439	0.0330UF S 50V J
C56	0CE4763F618	47UF SRE 16V M
C58	0CE4763F618	47UF SRE 16V M
C61	0CE1063F618	10UF SRE 16V M
C63	0CE4763F618	47UF SRE 16V M
C72	0CC8200K415	82P 50V J
C73	0CC3900K415	39P 50V J
C74	0CE1053K618	1UF SRE 50V M
C80	0CE4763F618	47UF SRE 16V M
C84	0CE4763F618	47UF SRE 16V M
C85	0CE107DF618	100UF STD 16V M
C88	0CN1030F679	10000P 16V M
C100	0CE476DK618	47UF STD 50V M
C101	181-007C	ECQ-V1H104JZ3(TR),50V 0.1
C105	0CE476DH618	47UF STD 25V M
C106	0CE475DK618	4.7000UF STD 50V M
C108	0CE476DF618	47UF STD 16V M
C111	0CN2230H949	22000P 25V Z

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LOCA. NO	PART NO	DESCRIPTION
C114	0CN1030F679	10000P 16V M
C115	0CE107DF618	100UF STD 16V M
C118	0CE4753K618	4.7UF SRE 50V M
C118	0CE475DK618	4.7000UF STD 50V M
C119	0CE4753K618	4.7UF SRE 50V M
C119	0CE475DK618	4.7000UF STD 50V M
C120	181-007C	ECQ-V1H104JZ3(TR),50V 0.1
C122	0CE476DK618	47UF STD 50V M
C127	181-007C	ECQ-V1H104JZ3(TR),50V 0.1
C130	0CE476DF618	47UF STD 16V M
C132	0CE107DF618	100UF STD 16V M
C133	0CE107DD618	100UF STD 10V M
C200	0CE106DF618	10UF STD 16V M
C201	0CE475DK618	4.7000UF STD 50V M
C202	0CE476DF618	47UF STD 16V M
C203	0CE107DF618	100UF STD 16V M
C204	0CE476DF618	47UF STD 16V M
C207	0CE106DF618	10UF STD 16V M
C210	0CE105DK618	1UF STD 50V M
C210	0CE474DK618	0.4700UF STD 50V M
C214	0CE475DK618	4.7000UF STD 50V M
C220	0CE107DF618	100UF STD 16V M
C223	0CE106DF618	10UF STD 16V M
C224	0CE476DF618	47UF STD 16V M
C226	0CE337DF618	330UF STD 16V M
C227	0CN4710K519	470P 50V K
C234	0CE1063F618	10UF SRE 16V M
C234	0CE106DF618	10UF STD 16V M
C235	0CE106DF618	10UF STD 16V M
C236	0CE106DF618	10UF STD 16V M
C237	0CE1063F618	10UF SRE 16V M
C237	0CE106DF618	10UF STD 16V M
C238	0CE106DF618	10UF STD 16V M
C241	0CE475DK618	4.7000UF STD 50V M
C244	0CE106DF618	10UF STD 16V M
C250	0CN1030F679	10000P 16V M
C302	0CQ1031N509	0.01U 100V K
C303	0CE4753K618	4.7UF SRE 50V M
C305	0CQ1531N509	0.015U 100V K
C306	0CE4763F618	47UF SRE 16V M
C307	0CQ2232K439	0.0220UF S 50V J
C309	0CE1074F618	100UF SRA 16V M
C310	0CQ2221N509	0.0022U 100V K
C313	0CE1053K618	1UF SRE 50V M
C316	0CE1053K618	1UF SRE 50V M
C329	0CE1063F618	10UF SRE 16V M
C330	0CE1063F618	10UF SRE 16V M
C332	0CE1053K618	1UF SRE 50V M
C332	0CE2253K618	2.2000UF SRE 50V M
C333	0CN1040K949	0.1M 50V Z
C334	0CN1040K949	0.1M 50V Z
C335	0CN1040K949	0.1M 50V Z
C336	0CN2230H949	22000P 25V Z

LOCA. NO	PART NO	DESCRIPTION
C338	0CE4763F618	47UF SRE 16V M
C340	0CE4763F618	47UF SRE 16V M
C341	0CE1053K618	1UF SRE 50V M
C342	0CE1063F618	10UF SRE 16V M
C343	0CE1053K618	1UF SRE 50V M
C347	0CN1030F679	10000P 16V M Y
C350	0CE1074F618	100UF SRA 16V M
C351	0CE4763F618	47UF SRE 16V M
C353	0CN1030F679	10000P 16V M
C355	0CE1053K618	1UF SRE 50V M
C355	0CE4753K618	4.7UF SRE 50V M
C356	0CN2230H949	22000P 25V Z
C357	0CE1053K618	1UF SRE 50V M
C357	0CE4753K618	4.7UF SRE 50V M
C359	0CE1053K618	1UF SRE 50V M
C365	0CE4763F618	47UF SRE 16V M
C367	0CQ2242K439	0.2200UF S 50V J
C368	0CE1063F618	10UF SRE 16V M
C368	0CE2263F618	22UF SRE 16V M
C369	0CQ2242K439	0.2200UF S 50V J
C370	0CE3363F618	33UF SRE 16V M
C371	0CQ2242K439	0.2200UF S 50V J
C377	0CE1074F618	100UF SRA 16V M
C377	0CE4763F618	47UF SRE 16V M
C379	0CE1053K618	1UF SRE 50V M
C381	0CE335DK618	3.3000UF STD 50V M
C389	0CE2263F618	22UF SRE 16V M
C390	0CE2253K618	2.2000UF SRE 50V M
C390	0CE335DK618	3.3000UF STD 50V M
C396	0CE107DF618	100UF STD 16V M
C398	0CE475DK618	4.7000UF STD 50V M
C504	0CE225DK618	2.2000UF STD 50V M
C506	0CE476DF618	47UF STD 16V M
C507	181-007F	ECQ-V1H224JZ3(TR),50V 0.2
C509	0CE107DF618	100UF STD 16V M
C510	181-007F	ECQ-V1H224JZ3(TR),50V 0.2
C512	181-007C	ECQ-V1H104JZ3(TR),50V 0.1
C519	0CE104DK618	0.1000UF STD 50V M
C528	0CE1074F618	100UF SRA 16V M
C529	0CQ4731N509	0.047U 100V K
C530	0CC6200K415	62PF 50V J
C531	0CE104DK618	0.1000UF STD 50V M
C532	0CE225DK618	2.2000UF STD 50V M
C534	0CE105DK618	1UF STD 50V M
C536	0CE684DK618	0.6800UF STD 50V M
C540	0CQ1041N455	0.1000UF 100V J
C541	0CSZVTA001G	2.2UF 25V K
"	0CSZVTA001C	TAP105K025BRS *KE-
C544	0CE106DH618	10UF STD 25V M
C545	181-007C	ECQ-V1H104JZ3(TR),50V 0.1
C546	0CC2710K415	270P 50V J
C547	0CC2710K415	270P 50V J
C547	0CN2710K519	270P 50V K

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RD : Carbon Film
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LOCA. NO	PART NO	DESCRIPTION
C548	181-007G	ECQ-V1H334JZ3(TR),50V 0.3
C601	0CE475DK618	4.7000UF STD 50V M
C602	0CE226DK618	22UF STD 50V M
C603	0CQ3931N509	0.0390UF 100V K
C604	0CE106DH618	10UF STD 25V M
C605	0CQ1041N509	0.1U 100V K
C606	0CE227DJ618	220UF STD 35V M
C607	0CE227DF618	220UF STD 16V M
C607	0CE477DF618	470UF STD 16V M
C608	0CN1010K519	100P 50V K
C609	0CE106DF618	10UF STD 16V M
C610	0CE475DK618	4.7000UF STD 50V M
C651	0CN1010K519	100P 50V K
C701	181-009V	PP 200V 0.047UF K
C702	0CE2261R618	22M SM 250V M
C703	0CK4710W515	470PF 500V K
C704	0CE337DK618	330UF STD 50V M
C705	0CK4710W515	470PF 500V K
C706	0CQ1031N509	0.01U 100V K
C708	0CE106DN618	10UF STD 100V M
C709	0CK4710W515	470PF 500V K
C731	0CN1010K519	100P 50V K
C732	0CQ1041N509	0.1U 100V K
C733	0CE337DK618	330UF STD 50V M
C734	0CE226DN618	22UF STD 100V M
C736	0CQ1031N509	0.01U 100V K
C738	0CQ1041N509	0.1U 100V K
C739	0CN1040K949	0.1M 50V Z F TA52
C740	0CX5600K409	56P 50V J SL TA52
C743	0CQ1031N509	0.01U 100V K
C744	0CN1010K519	100P 50V K
C781	181-015J	1600V 0.0086UF H
"(14")	181-015G	1600V 0.0077UF H
C782	0CE105DP618	1UF STD 160V M
C783	0CK8210W515	820P 500V K
"(20")	0CK3310W515	330P 500V K
C784	0CN3310K519	330P 50V K
C785	0CE225DP618	2.2000UF STD 160V M
C786	0CK8210W515	820P 500V K
C787	181-013C	200V 0.39UF J
⚠ C801	0CQZVBK002A	A.C 275V 0.1UF M (S=15)
⚠ C802	0CQZVBK002A	A.C 275V 0.1UF M (S=15)
C805	0CK10201515	1000P 1KV K
C806	181-001H	CE 400V 330UF M
C807	0CK10201515	1000P 1KV K
C808	0CK1020W515	1000P 500V K
C809	0CE106DN618	10UF STD 100V M
C810	0CE227DF618	220UF STD 16V M
C811	181-014A	1600V 0.0022UF J
C811	181-033T	2KV B 222K TP7.5
C812	181-091J	R 821K 2KV TP7.5
⚠ C813	181-120K	ACT 4KV E 222M
C814	0CE107DJ618	100UF STD 35V M

LOCA. NO	PART NO	DESCRIPTION
C816	0CQ1041N509	0.1U 100V K
C850	0CK4710W515	470PF 500V K
C851	0CK4710W515	470PF 500V K
C852	0CK4710W515	470PF 500V K
C853	0CK4710W515	470PF 500V K
C854	0CK4710W515	470PF 500V K
C855	0CK4710W515	470PF 500V K
C856	0CE107DN618	100UF STD 100V M
C857	0CE108DF618	1000UF STD 16V M
C858	0CE108DH618	1000UF STD 25V M
C859	0CE108DJ618	1000UF STD 35V M
C860	0CE227DP61A	220UF STD 160V M
C862	0CE108DF618	1000UF STD 16V M
C863	0CE477DF618	470UF STD 16V M
C864	0CE106DF618	10UF STD 16V M
C865	0CE1071P61A	100UF SM 160V M
C866	0CE477DF618	470UF STD 16V M
C867	0CE477DH618	470UF STD 25V M
C868	0CE228DF618	2200UF STD 16V M
C869	0CK4710W515	470PF 500V K B TR
C870	0CQ1031N509	0.01U 100V K
C874	0CE477DF618	470UF STD 16V M
C875	0CE228DD618	2200UF STD 10V M
C876	0CE4741K636	0.47UF SM 50V M
C904	0CQZVBK002A	A.C 275V 0.1UF M (S=15)
C905	0CE475DR618	4.7000UF STD 250V M
C906	0CE475DR618	4.7000UF STD 250V M
C907	181-033T	2KV B 222K TP7.5
FUSE		
⚠ F801	0FT4001B53C	FUSE,TIME LAG 4000MA 250V 5.2X20
⚠ F851	131-096E	FUSE,NON TIME DELAY 4000MA 125V 2.5X7.6
⚠ F852	131-096E	FUSE,NON TIME DELAY 4000MA 125V 2.5X7.6
⚠ F853	131-096E	FUSE,NON TIME DELAY 4000MA 125V 2.5X7.6
CORE		
FB651	125-123A	CORE (CIRC),FERRITE BFD3565R2F
FB801	125-022K	CORE (CIRC),BEAD FERRITE 1UH
FB802	125-123A	CORE (CIRC),FERRITE BFD3565R2F
FB803	125-022K	CORE (CIRC),BEAD FERRITE 1UH
⚠ FB851	125-022K	CORE (CIRC),BEAD FERRITE 1UH
L222	125-022K	CORE (CIRC),BEAD FERRITE 1UH
L510	125-022K	CORE (CIRC),BEAD FERRITE 1UH
⚠ L731	125-022K	CORE (CIRC),BEAD FERRITE 1UH
L902	125-022K	CORE (CIRC),BEAD FERRITE 1UH
COIL & TRANSFORMER		
L01S	0LA0222K119	INDUCTOR,22UH K
L01	0LA1000K139	INDUCTOR,100UH K
L02S	0LA0222K119	INDUCTOR,22UH K
L02	0LA1000K139	INDUCTOR,100UH K
L03	0LA1000K139	INDUCTOR,100UH K
L04	0LA1000K139	INDUCTOR,100UH K

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LOCA. NO	PART NO	DESCRIPTION
L05	0LA1000K139	INDUCTOR,100UH K
L06	0LA0821K119	INDUCTOR,8.2UH K
L07	0LA0222K119	INDUCTOR,22UH K
L07	0LA1000K119	INDUCTOR,100UH K
L10	0LA1000K119	INDUCTOR,100UH K
L11	0LA0222K119	INDUCTOR,22UH K
L12	0LA0222K119	INDUCTOR,22UH K
L13	0LA0222K119	INDUCTOR,22UH K
L101	0LA0222K119	INDUCTOR,22UH K
L102	150-C01G	COIL,CHOKE 1.0UH A 1105
L103	0LA0102K119	INDUCTOR,10UH K
L104	0LA0102K119	INDUCTOR,10UH K
L105	0LA0102K119	INDUCTOR,10UH K
L106	0LA0122K119	INDUCTOR,12UH K
L107	150-E16C	COIL,IFT VAR,07S 1B 38.9MHZ
L108	0LA0102K139	INDUCTOR,10UH K
L144	0LA0102K119	INDUCTOR,10UH K
L200	0LA0102K119	INDUCTOR,10UH K
L200	0LA0102K119	INDUCTOR,10UH K
L201	0LA0102K119	INDUCTOR,10UH K
L203	0LA0102K119	INDUCTOR,10UH K
L204	0LA0102K119	INDUCTOR,10UH K
L205	0LA0102K119	INDUCTOR,10UH K
L206	0LA0102K119	INDUCTOR,10UH K
L207	0LA1000K119	INDUCTOR,100UH K
L209	0LA1000K119	INDUCTOR,100UH K
L210	0LA0102K119	INDUCTOR,10UH K
L300	0LA0222K119	INDUCTOR,22UH K
L301	0LA0562K119	INDUCTOR,56UH K
L302	0LA0332K119	INDUCTOR,33UH K
L303	0LA0222K119	INDUCTOR,22UH K
L306	0LA0222K119	INDUCTOR,22UH K
L307	0LA0222K119	INDUCTOR,22UH K
L309	0LA0272K119	INDUCTOR,27UH K
L310	0LA0222K119	INDUCTOR,22UH K
L391	0LA0102K119	INDUCTOR,10UH K
L500	0LA0331K119	INDUCTOR,3.3UH K
L501	0LA0331K119	INDUCTOR,3.3UH K
L502	0LA0821K119	INDUCTOR,8.2UH K
L503	0LA0102K119	INDUCTOR,10UH K
L504	0LA0561K119	INDUCTOR,5.6UH K
L505	0LA0561K119	INDUCTOR,5.6UH K
L506	0LA0561K119	INDUCTOR,5.6UH K
L507	0LA0102K139	INDUCTOR,10UH K
L508	0LA0102K119	INDUCTOR,10UH K
L509	0LA0102K119	INDUCTOR,10UH K
L652	0LA0101K119	INDUCTOR,1.0UH K
L733	0LA0102K139	INDUCTOR,10UH K
L734	0LA0102K139	INDUCTOR,10UH K
L782	150-L02C	COIL,H-LINEARITY 170UH
"(14")"	150-L02W	COIL,H-LINEARITY 11.5UH
⚠ L801	150-F06H	COIL,LINE FILTER SQE2930 30MH
L851	150-C02E	COIL,CHOKE 50UH R 1217

LOCA. NO	PART NO	DESCRIPTION
L901	0LR0102K520	INDUCTOR,10M K
T300	633-032N	COIL,CAN BIAC OSC DEO-010 KSE
T301	150-B05C	COIL,L/C FILTER(07S) LPF
⚠ T701	6174Z-6022D	FBT,FTMPN91
"(14")"	6174Z-6022E	FBT,FTMPN91
T781	151-C02H	TRANSFORMER,H-DRIVE,EI-19,BULK
⚠ T801	151-A13J	TRANSFORMER,SMPS EER4215 700UH
CONNECTOR		
	387-907D	CONNECTOR ASSY,1P MXH8610 250MM
	387-916D	CONNECTOR ASSY,1P 250MM
	6631V25014G	CONNECTOR ASSY,2.5MM 3P(L=700)
	6631V25021E	CONNECTOR ASSY,13P(L=450)
	6631V25021R	CONNECTOR ASSY,2P 80MM
	6631V25027G	CONNECTOR ASSY,2.5MM 8P(L=400)
P01	561-234V	CONNECTOR(CIRC),GF120-07S-TS 7PIN 1.25MM
P04	6630R2S011A	CONNECTOR(CIRC),TMC-T02X-C1 2PIN 2.5MM
P101A	387-A02Q	CONNECTOR ASSY,2P 80MM 2.5
P301	6630R5S008E	CONNECTOR(CIRC),06(11)FM22.5H-BTR 6PIN 1MM
P302	561-251B	CONNECTOR(CIRC),GB201-2P-TS-B
P303	561-234Z	CONNECTOR(CIRC),GF120-3S-TS-A 3PIN 1.25MM
P651	387-B02E	CONNECTOR ASSY,2P SHIELD WIRE (L=300)
P805A	6631V25017G	CONNECTOR ASSY,2.5MM 12P(L=400)
P901A	387-A05D	CONNECTOR ASSY,5P (L=250)
PD04	561-234V	CONNECTOR(CIRC),GF120-07S-TS 7PIN 1.25MM
PD04	6630R2P005C	CONNECTOR(CIRC),TMC-J08P-A1 8PIN 2MM
RESISTOR		
⚠ FR701	0RF0561J607	5.60 1W 5% TA62
⚠ FR702	0RF0470J607	0.47 1W 5% TA62
⚠ FR704	0RF0101H609	1.0 1/2W 5 TA52
FR851	0RF0470H609	0.47 1/2W 5 TA52
⚠ FR854	0RF0101J607	1 1W 5% TA62
FR901	180-D02E	2W 1.0 J TA31
"(14")"	180-D02L	2W 2.0 J TA31
FR902	180-D02E	2W 1.0 J TA31
J200	0RD1001F609	1.0K 1/6W 5 TA52
J833	0RF0470H609	0.47 1/2W 5 TA52
R01	0RD1001F609	1.0K 1/6W 5 TA52
R02	0RD1001F609	1.0K 1/6W 5 TA52
R03	0RD1001F609	1.0K 1/6W 5 TA52
R04	0RD1001F609	1.0K 1/6W 5 TA52
R06	0RD1001F609	1.0K 1/6W 5 TA52
R08	0RD1001F609	1.0K 1/6W 5 TA52
R08S	0RD5600F609	560 1/6W 5 TA52
R09S	0RD1000F609	100 1/6W 5 TA52
R09	0RD1001F609	1.0K 1/6W 5 TA52
R10	0RD1000F609	100 1/6W 5 TA52
R11	0RD1000F609	100 1/6W 5 TA52
R12	0RD1000F609	100 1/6W 5 TA52
R14	0RD2200F609	220 1/6W 5 TA52
R17	0RD5601F609	5.6K 1/6W 5 TA52
R18	0RD1001F609	1.0K 1/6W 5 TA52

R.P.L

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LOCA. NO	PART NO	DESCRIPTION
R19	0RD1001F609	1.0K 1/6W 5 TA52
R20	0RD2200F609	220 1/6W 5 TA52
R22	0RD2200F609	220 1/6W 5 TA52
R23	0RD2200F609	220 1/6W 5 TA52
R24	0RD2200F609	220 1/6W 5 TA52
R25	0RD2200F609	220 1/6W 5 TA52
R26	0RD2200F609	220 1/6W 5 TA52
R27	0RD1002F609	10K 1/6W 5 TA52
R28	0RD2200F609	220 1/6W 5 TA52
R31	0RD4701F609	4.70K 1/6W 5% TA52
R33	0RD2200F609	220 1/6W 5 TA52
R38	0RD4701F609	4.70K 1/6W 5% TA52
R42	0RD3300F609	330 1/6W 5 TA52
R43	0RD2200F609	220 1/6W 5 TA52
R45	0RD2200F609	220 1/6W 5 TA52
R46	0RD2200F609	220 1/6W 5 TA52
R55	0RD5600F609	560 1/6W 5 TA52
R57	0RD1000F609	100 1/6W 5 TA52
R59	0RD1801F609	1.8K 1/6W 5 TA52
R67	0RD8201F609	8.2K 1/6W 5 TA52
R68	0RD1801F609	1.8K 1/6W 5 TA52
R69	0RD1001F609	1.0K 1/6W 5 TA52
R74	0RD5602F609	56K 1/6W 5 TA52
R77	0RD1001F609	1.0K 1/6W 5 TA52
R90	0RD2200F609	220 1/6W 5 TA52
R92	0RD4701F609	4.70K 1/6W 5% TA52
R97	0RD5601F609	5.6K 1/6W 5 TA52
R98	0RD5601F609	5.6K 1/6W 5 TA52
R99	0RS0561K607	5.60 2W 5% TA62
R101	0RD4702F609	47K 1/6W 5 TA52
R102	0RD1001H609	1K OHM 1/2 W 5% TA52
R109	0RD3302F609	33K 1/6W 5% TA52
R110	0RD1001F609	1.0K 1/6W 5 TA52
R112	0RD0102F609	10 1/6W 5 TA52
R125	0RD1004F609	1.0M 1/6W 5 TA52
R128	0RD1000F609	100 1/6W 5 TA52
R144	0RD4701F609	4.70K 1/6W 5% TA52
R146	0RD0102F609	10 1/6W 5 TA52
R147	0RD1001F609	1.0K 1/6W 5 TA52
R148	0RD1001F609	1.0K 1/6W 5 TA52
R149	0RD1001F609	1.0K 1/6W 5 TA52
R153	0RD1002F609	10K 1/6W 5 TA52
R153	0RD4701F609	4.70K 1/6W 5% TA52
R154	0RD4701F609	4.70K 1/6W 5% TA52
R205	0RD4701F609	4.70K 1/6W 5% TA52
R208	0RD1502F609	15K 1/6W 5 TA52
R214	0RD4700F609	470 1/6W 5 TA52
R215	0RD2200F609	220 1/6W 5 TA52
R219	0RD0682F609	68 1/6W 5 TA52
R220	0RD5101F609	5.1K 1/6W 5 TA52
R221	0RD5101F609	5.1K 1/6W 5 TA52
R224	0RD1001F609	1.0K 1/6W 5 TA52
R235	0RD1000F609	100 1/6W 5 TA52

LOCA. NO	PART NO	DESCRIPTION
R236	0RD1002F609	10K 1/6W 5 TA52
R237	0RD1002F609	10K 1/6W 5 TA52
R238	0RD1001F609	1.0K 1/6W 5 TA52
R302	0RD1000F609	100 1/6W 5 TA52
R309	0RD5600F609	560 1/6W 5 TA52
R319	0RD1002F609	10K 1/6W 5 TA52
R321	0RD1001F609	1.0K 1/6W 5 TA52
R333	0RD1000F609	100 1/6W 5 TA52
R334	0RD1000F609	100 1/6W 5 TA52
R348	0RD1001F609	1.0K 1/6W 5 TA52
R360	0RD2202F609	22K 1/6W 5 TA52
R361	0RD6801F609	6.8K 1/6W 5 TA52
R363	0RD4702F609	47K 1/6W 5 TA52
R364	0RD4702F609	47K 1/6W 5 TA52
R365	0RD4702F609	47K 1/6W 5 TA52
R380	0RD1000F609	100 1/6W 5 TA52
R381	0RD1000F609	100 1/6W 5 TA52
R382	0RD1000F609	100 1/6W 5 TA52
R451	0RD2201F609	2.2K 1/6W 5 TA52
R452	0RD2701F609	2.7K 1/6W 5 TA52
R453	0RD3901F609	3.9K 1/6W 5 TA52
R454	0RD6801F609	6.8K 1/6W 5 TA52
R508	0RD0472F609	47 1/6W 5% TA
R512	0RD1002F609	10K 1/6W 5 TA52
R515	0RD1001F609	1.0K 1/6W 5 TA52
R516	0RD1001F609	1.0K 1/6W 5 TA52
R517	0RD1001F609	1.0K 1/6W 5 TA52
R521	0RD1003F609	100K 1/6W 5 TA52
R527	0RD9102F609	91K 1/6W 5 TA52
R529	0RN3902F409	39K 1/6W 1% TA52
R530	0RD1201F609	1.2K 1/6W 5 TA52
R601	0RD1003F609	100K 1/6W 5 TA52
R602	0RD1003F609	100K 1/6W 5 TA52
R603	0RD1003F609	100K 1/6W 5 TA52
R604	0RS0221H609	2.2 1/2W 5 TA52
R605	0RD6802F609	68K 1/6W 5 TA52
R606	0RD8201F609	8.2K 1/6W 5 TA52
R607	0RD4701F609	4.70K 1/6W 5% TA52
R608	0RD4701F609	4.70K 1/6W 5% TA52
R609	0RD1001F609	1.0K 1/6W 5 TA52
R610	0RD1201F609	1.2K 1/6W 5 TA52
R611	0RD1003F609	100K 1/6W 5 TA52
R651	0RD2000H609	200 1/2W 5 TA52
R652	0RD2000H609	200 1/2W 5 TA52
R654	0RD4300F609	430 1/6W 5 TA52
R702	0RS5101H609	5.1K 1/2W 5 TA52
R703	0RD5101F609	5.1K 1/6W 5 TA52
“(14”)	0RD6201F609	6.2K 1/6W 5 TA52
R704	0RD2003H609	200K 1/2W 5 TA52
R706	0RD4701H609	4.7K 1/2W 5 TA52
R731	0RN1501F409	1.5K 1/6W 1 TA52
“(14”)	0RN2001F409	2K 1/6W 1 TA52
R733	0RN0680J607	0.68 1W 5% TA62

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LOCA. NO	PART NO	DESCRIPTION
R734	0RD0202F609	20 1/6W 5 TA52
R735	0RS0332H609	33 1/2W 5 TA52
R739	0RS2200J607	220 1W 5% TA62
R740	0RN3901F409	3.9K 1/6W 1
R781	0RD0392H609	39 1/2W 5 TA52
R782	0RD3301H609	3.3K 1/2W 5 TA52
R783	0RS4701K607	4.70K 2W 5% TA62
R784	0RD4700F609	470 1/6W 5 TA52
R785	0RS1202K607	12K 2W 5% TA62
R786	0RD1801H609	1.8K 1/2W 5 TA52
R787	0RS2701K607	2.70K 2W 5% TA62
“(14”)	0RS6801K607	6.8K 2W 5% TA62
R788	0RD0912F609	91 1/6W 5 TA52
R801	180-A03A	G 5W 2.20 J DOUBLE
R805	0RS2202K607	22K 2W 5% TA62
R806	0RS2202K607	22K 2W 5% TA62
R807	0RS1202H609	12K 1/2W 5 TA52
R808	0RD1801F609	1.8K 1/6W 5 TA52
R809	0RD1001F609	1.0K 1/6W 5 TA52
R810	0RS0222K607	22 2W 5% TA62
R811	180-A01H	G 2W 0.27 J TA31(63)
R812	0RD5600F609	560 1/6W 5 TA52
⚠ R813	180-C02H	RC 1/2W 8.2M K
R816	0RD3900F609	390 1/6W 5 TA52
R821	0RD6801H609	6.8K 1/2W 5 TA52
R822	0RD1000H609	100 OHM 1/2 W 5% TA52
R823	0RD4701F609	4.70K 1/6W 5% TA52
R824	0RD4701F609	4.70K 1/6W 5% TA52
R825	0RD6801F609	6.8K 1/6W 5 TA52
R851	0RD1002F609	10K 1/6W 5 TA52
R851	0RD4701F609	4.70K 1/6W 5% TA52
R851	0RD8201F609	8.2K 1/6W 5 TA52
R852	0RD3301F609	3.3K 1/6W 5 TA52
R853	0RD2001F609	2.0K 1/6W 5 TA52
R856	0RD1002F609	10K 1/6W 5 TA52
R857	0RD4701F609	4.70K 1/6W 5% TA52
R858	0RF0470H609	0.47 1/2W 5 TA52
R860	0RS4700J607	470 1W 5% TA62
R862	0RS0472H609	47 1/2W 5 TA52
R863	0RD1002F609	10K 1/6W 5 TA52
R864	0RD1002F609	10K 1/6W 5 TA52
R864	0RS3002H609	30K 1/2W 5 TA52
R865	0RS0470K607	0.47 2W 5% TA62
R866	0RS0470J607	0.47 1W 5% TA62
R867	0RS0470K607	0.47 2W 5% TA62
R870	0RD1002F609	10K 1/6W 5 TA52
R871	0RD2002F609	20K 1/6W 5 TA52
R872	0RD2002H609	20K 1/2W 5 TA52
R873	0RD1001H609	1K OHM 1/2 W 5% TA52
R874	0RS0102J607	10 1W 5% TA62
R901	0RD2200F609	220 1/6W 5 TA52
R902	0RD2200F609	220 1/6W 5 TA52
R903	0RD2200F609	220 1/6W 5 TA52

LOCA. NO	PART NO	DESCRIPTION
R904	0RD2200F609	220 1/6W 5 TA52
R905	0RD2200F609	220 1/6W 5 TA52
R907	0RS1801H609	1.8K 1/2W 5 TA52
R908	0RS1801H609	1.8K 1/2W 5 TA52
R909	0RS1801H609	1.8K 1/2W 5 TA52
R911	0RD2204H609	2.2M 1/2W 5 TA52
RA07	0RD3902F609	39K 1/6W 5 TA52
RA11	0RD3902F609	39K 1/6W 5 TA52
RA20	0RD4700F609	470 1/6W 5 TA52
RA21	0RD4700F609	470 1/6W 5 TA52
RA22	0RD5600F609	560 1/6W 5 TA52
RA23	0RD4700F609	470 1/6W 5 TA52
RA30	0RD2700F609	270 1/6W 5 TA52
RA33	0RD1202F609	12K 1/6W 5 TA52
RA34	0RD1000F609	100 1/6W 5 TA52
VR01	180-F03M	EVN-DJAY03 B204
SPARK GAP		
SG901	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG902	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG903	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG904	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SWITCH		
P03	6600RPY001B	SWITCH,DETECTOR MMS00420ZMBO 5V 1MA VE
SW01	6600RDB004C	SWITCH,DETECTOR MPU10252MLB4 5V 0.01A
SW02	140-315C	SWITCH,TACT 4LEAD EVQPB905X
SW03	140-315C	SWITCH,TACT 4LEAD EVQPB905X
SW04	140-315C	SWITCH,TACT 4LEAD EVQPB905X
SW05	140-315C	SWITCH,TACT 4LEAD EVQPB905X
SW06	140-315C	SWITCH,TACT 4LEAD EVQPB905X
SW07	140-315C	SWITCH,TACT 4LEAD EVQPB905X
SW08	140-315C	SWITCH,TACT 4LEAD EVQPB905X
SW09	140-315C	SWITCH,TACT 4LEAD EVQPB905X
SW10	140-315C	SWITCH,TACT 4LEAD EVQPB905X
SW11	140-313B	SWITCH,TACT 2LEAD 160G(TA)
SW12	140-313B	SWITCH,TACT 2LEAD 160G(TA)
SW13	140-313B	SWITCH,TACT 2LEAD 160G(TA)
SW14	140-313B	SWITCH,TACT 2LEAD 160G(TA)
⚠ SW851	6600VM1001A	SWITCH,PUSHSDKLA1 UL/CSA 250V 5A VER
FILTER & CRYSTAL		
F100	166-B02C	FILTER,SFSH5.5MCB-TF21 5.5MHZ
F101	166-B02E	FILTER,SFSH6.5MCB-TF21 6.5MHZ
F102	166-B02D	FILTER,SFSH6.0MCB-TF21 6.0MHZ
L100	166-F01G	FILTER,DSS306-93FZ103N MURATA 100V
T100	166-C06A	FILTER,TRAP MKT40.9MA110P-TF01
T101	166-C06D	FILTER,TRAP MKT40.4MA110P-TF01
T102	166-C06D	FILTER,TRAP MKT40.4MA110P-TF01
T500	166-C02C	FILTER,TRAPTPS5.5MB-TF21 5.5MHZ
Z100	166-A01B	FILTER,OFWK3953M 37.4MHZ
“	6200VQS001M	FILTER,OFWG3963M
Z101	6200VQS001D	FILTER,SAW OFWK9260M 38.9MHZ

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LOCA. NO	PART NO	DESCRIPTION
Z102	166-A01L	FILTER,OFWL9453M
X01S	156-A01X	CRYSTAL,HC49U RADIAL 4.286MHZ 30PP
X01	156-A08A	CRYSTAL,HC49U RADIAL 32.768KH
X02	156-A01T	CRYSTAL,HC49U RADIAL 10.000MHZ
X301	6202R1443AC	CRYSTAL,X-TAL 4.433709M 15PPM SER KJE
X500	156-A01C	CRYSTAL,HC49U RADIAL 3.579545MHZ
X501	156-A01V	CRYSTAL,HC49U RADIAL 4.433619MHZ
X502	156-A01C	CRYSTAL,HC49U RADIAL 3.579545MHZ
TELETEXT PARTS		
C04T	0CE107DF618	100UF STD 16V M
C05T	0CC3300K415	33P 50V J
C06T	0CC3300K415	33P 50V J
C07T	0CE106DF618	10UF STD 16V M
C08T	0CQ3332K439	0.0330UF S 50V J
C10T	0CE107DF618	100UF STD 16V M
C11T	0CN1030F679	10000P 16V M
C12T	0CE107DF618	100UF STD 16V M
C23T	0CE476DF618	47UF STD 16V M
C24T	181-007G	ECQ-V1H334JZ3(TR),50V 0.3
IC01T	0ISM545400A	IC,SDA5454-B001 52P SDIP BK TXT T
IC03T	0ISS753300A	IC,KA7533Z RESET T0-92 TP 3.3V
L01T	0LA0102K119	INDUCTOR,10UH K
L02T	0LA0102K119	INDUCTOR,10UH K
L03T	0LA0102K119	INDUCTOR,10UH K
L08T	0LA0102K119	INDUCTOR,10UH K
Q01T	0TR387500AA	TR,2SC3875S(ALY) KEC
Q02T	0TR387500AA	TR,2SC3875S(ALY) KEC
Q03T	0TR387500AA	TR,2SC3875S(ALY) KEC
Q04T	0TR102009AG	TR,KRC102S SOT-23 TP KEC
R01T	0RD1000F609	100 1/6W 5 TA52
R02T	0RD1000F609	100 1/6W 5 TA52
R05T	0RN2702F409	27K 1/6W 1% TA52
X01T	156-A01L	CRYSTAL,STANDARD HC49U 6.000MHZ
ACCESSORIES		
A1	3828VA0190L	MANUAL,OWNERS FS 5 BRAND NO FR 032
A1	3828VA0190D	MANUAL,OWNERS UK,LG,EN 032C
A1	3828VA0190G	MANUAL,OWNERS ES LG SP/PO
A1	3828VA0190K	MANUAL,OWNERS JP/AG LG DA
A2	6710V00032J	REMOTE CONTROLLER,NO BRAND
A2	6710V00032C	REMOTE CONTROLLER,W/O TXT
A2	6710V00032E	REMOTE CONTROLLER,W/TXT,1 TUNER
A3	132-210H	ANTENNA,ROD W/ADAPTER L=650
A3	132-210G	ANTENNA,ROD W/ADAPTER L=500
MISCELLANEOUS		
	303-F62A	COVER,TUNER
	879-019K	CABLE ASSY,FFCFFC 7PX100MM (P=1.25)
JK01	6613V00009B	JACK ASSY,PMJ015B W/O E/P+A/V
JK601	380-400A	JACK,EARPHONE HEADPHONE 3.5 STEREO
RC01	6726VV0006B	PRE-AMP,TSOP1838ON1 TEMIC 38.0KHZ
S01	6500RAB002A	SENSOR,GP1S566 SHARP D-33 REEL SENSOR

LOCA. NO	PART NO	DESCRIPTION
S02	6500RAB002A	SENSOR,GP1S566 SHARP D-33 REEL SENSOR
S03	4930V00090A	HOLDER,END SENSOR ASSY(33 DECK)
S04	4930V00090A	HOLDER,END SENSOR ASSY(33 DECK)
SK200	381-091A	SOCKETS-091A URIM ELECTRNICS 21
⚠ SK901	6620VBC001A	SOCKET,CPT 29.1 PHI SINGLE(PCS629-03A)
⚠ SK902	6620VBA001A	SOCKET,CPT PCS-633A
⚠ TH801	163-051F	THERMISTOR,PTC J503P84D140M290Q
TU100	6700VPF005A	TUNER,TU8PSD01DB PAL DIN BG/L 3
TU100	6700VPF005C	TUNER,TAEC-G022D
VA801	164-003D	VARISTOR,SVC 561D-14A

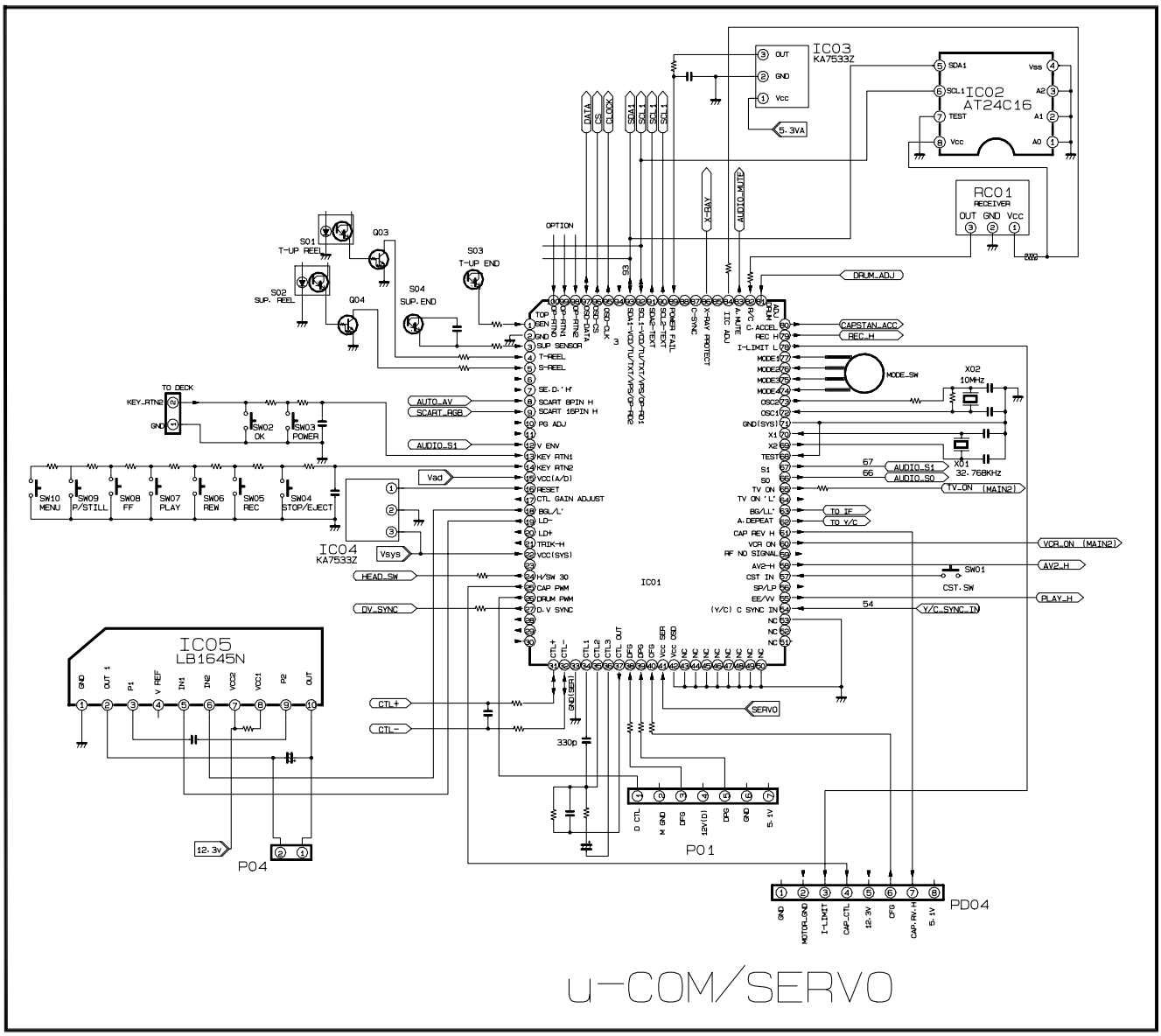
EXPLODED VIEW:KE/KL-14/20U73/X

DISASSEMBLY

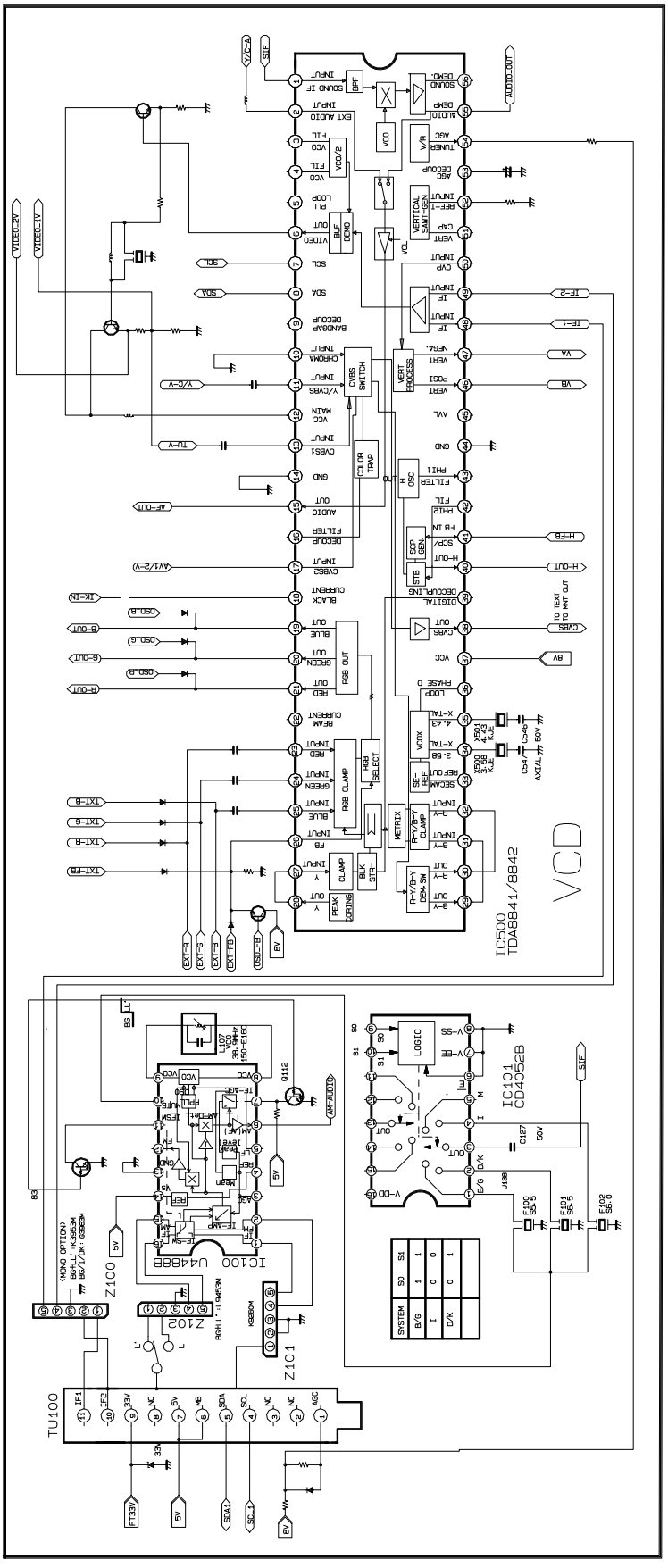
EXPLODED VIEW PART LIST

NO	PART NO		DESCRIPTIONS
	14"	20"	
⚠ 112	2055-V0744D	2055-V1221B	CPT
	-	2055-V1221A	CPT,A48QAD220X 03L7ND *AGON
120	120-101D	120-C93G	SPEAKER
⚠ 150	150-D02B	150-D02M	COIL,DEGAUSSING
⚠ 153	153-113V	153-276A	DY
⚠ 170	170-A01A	170-A01D	LEAD SET,CPT EARTH
300	-	3091V00057S	CABINET ASSY(GRANDIN)
	-	3091V00057U	CABINET ASSY(HYPSON)
	3091V00064X	3091V00057T	CABINET ASSY,LG
310	5020V00137A	5020V00118A	BUTTON,CONTROL
315	315-740H	315-740K	DOOR,CST
320	4970V00001A	4970V00001A	SPRING,CST DOOR
330	320-062J	320-075B	SPRING,KNOB
340	5020V00135A	5020V00116A	BUTTON,POWER MAIN
350	5020V00138A	5020V00119A	BUTTON,CH/VOL
360	5020V00136A	5020V00117A	BUTTON,POWER SUB
400	3809V00076E	3809V00043M	BACK COVER ASSY
501	4810V00012A	4810V00012A	BRACKET,SMPS
520	6871VDM076C	6871VDM076B	PWB ASSY,MAIN2
601	4810V00156A	4810V00156A	BRACKET,MAIN,U70,(33DECK)
602	4814V00016B	4814V00016B	SHIELD,MAIN 1 BOTTOM
603	4814V00015E	4814V00015F	SHIELD,TOP CASE,33DECK
610	6871VMM323B	6871VMM323B	PWB ASSY,MAIN(LL/BG,W/O TXT)
	6871VMM323C	6871VMM323C	PWB ASSY,MAIN(KE-,W/TXT)
	6871VMM323E	6871VMM323E	PWB ASSY,MAIN(KE-,W/O TXT)
913	332-057A	332-057B	SCREW ASSY,HEXAGON HEAD
943	1PTF0403116	1PTF0403116	SCREW,TAP TITE D4.0 L16.0
A00	6721R-0105A	6721R-0105A	DECK ASSY,D33
⚠ P851	6410VEH002B	6410VEH002B	POWER CORDN VDE/SEMKO 2
	174-225K	174-225E	CORD ASSY.POWER FOR UK

BLOCK DIAGRAM

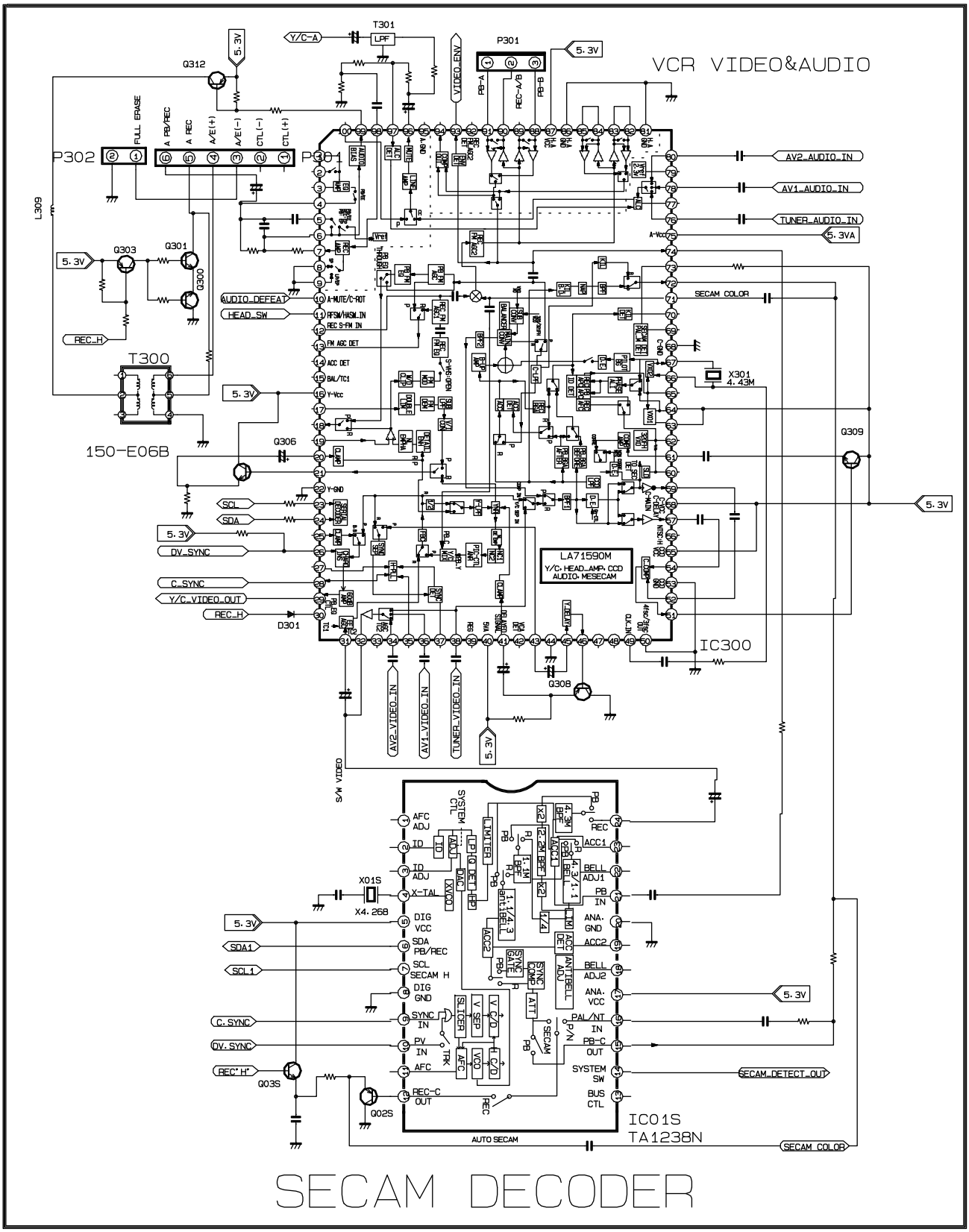


VCD BLOCK DIAGRAM



ELECTRICAL

VIDEO/AUDIO BLOCK DIAGRAM



CIRCUIT DIAGRAM OF MV-995A

P/No. : 3854VA0060A
Date : 1999.7.15

P500
TO CPT BOARD P2902

P501A
FROM MAIN2 P805

IC500
TDA8841/8842

VCD

IC100 U4488B

IC101
CD4052B

IF

IC200 LA7016

IC201
LA7016

AV S/W

IC300

Y/C

IC01S TA1238N

SECAM DECODER

IC01
SDA5457

TXT

IC03
KA75332

IC02
AT24C16

RC01
RECEIVER

IC202 W/SCART

IC04
KA7533Z

SERVO

IC05
LB1645N

IC06
35041-075FP

OSD

SYS & CON

SK200

JK202

JK201

KEY_BOARD

P01 P04 P03 P04 P805A FROM MAIN2 P805

P301 P302 P303

CDR NBR	OPTION	
D00	SYSTEM	0-L/L'BG X-BG-DK-I
D01	SECAM/MESECAM	0-DEL X-ADD
D02	SP/LP	0-SP ONLY X-SP/LP
D03	TEXT	0-DEL X-ADD
D04	VPS/PDC	
D05	NC	

SYSTEM	S0	S1
B/G	1	1
I	0	0
D/K	0	1

	① 2.8Vp-p 1KHZ	② 2Vp-p	③ 220mVp-p	④ 28Vp-p 15.75KHZ	⑤ 1.7Vp-p	⑥ 5Vp-p 15.75KHZ	⑦ 5Vp-p 60HZ	⑧ 0.2Vp-p	⑨ 1.4Vp-p	⑩ 4.4Vp-p	⑪ 3.2Vp-p	⑫ 4.0Vp-p	⑬ 7Vp-p
WAVEFORMS V/C IC 402		P2N21(PB) 500mVpp	P2N31(PB) 500mVpp	P2N41(REC) 500mVpp	P2N51(REC) 500mVpp	P2N61(REC) 1.0Vpp	P2N81(PB) 400mVpp	P2N11(PB) 350mVpp	P2N141(REC) 360mVpp	P2N171(PB) 550mVpp	P2N181(PB) 480mVpp	P2N211(PB) 200mVpp	P2N251(PB) 4.2Vpp	P2N28 2Vpp	P2N30 5.0Vpp	P2N31 1.0Vpp	P2N341(REC) 1.2Vpp	P2N351(PB) 420mVpp	P2N351(PB)1500mVpp

PB.V
PB.A
REC.V
REC.A

MV-995A MAIN2 SCHEMATIC DIAGRAM

P/No. : 3854VA0060A
Date : 1999.7.15

NOTICE
Since this is a basic schematic diagram, The value of components and some partical connection aresubject to change for improvement.

The components marked ⚠ conform to VDE or IEC guidelines and are essential for safe operation of the set. while those marked ⚠ are required for correct operation. Use specified parts only when replacing.

VALUE OF RESISTER, CAPACITOR AND INDUCTOR

1. Resistances are shown in ohm, K = 1,000 M = 1,000,000 .
2. Unless otherwise noted in schematic, all capacitor values less than 1 are expresses in mfd and the values more than 1 in pF
3. Unless otherwise noted in schematic, all coil values more than 1 are expressed in uH, and the values less than 1 in H.

OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltages 220 Volts, colour bar signal
2. Voltages reading may very ±20%.
3. The schematic shown is representative only.
4. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
5. Check FINE TUNING, AGC, BRIGHTNESS, CONTRAST and COLOUR controls for best picture, make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS controls is almost in maximum position.
6. Waveforms are takrn using a standard colour bar signal.

Audio Out
Vertical Out
H-Out